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Communications.

ON BLOOD LETTING IN INFLAMMATORY DISEASES.

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A physician in Illinois, in a personal letter, has criticised me pretty sharply for taking up so much space in showing the value of blood-letting in a single disease, and adds: "This senseless twaddle over cures made by medicines or remedies is getting worn threadbare; we need more teaching on the physiological action of medicines and less (fewer) specifics." Exactly what he means by this I do not know; but doubtless there is wisdom in it. I feel that I have taken up much of your space in the Reporter which, possibly, could have been better used; but this is so important a subject that men who have practiced a long time and proved the value of means of cure ought, in view of the fearful mortality which the present teaching of the medical colleges has produced, to speak out. I have this very day received a letter from a physician in Mi lin county, in which he says: When, eleven years ago, I graduated at the University of Pennsylvania, I received a letter from my father (then a practitioner of thirty years' standing) telling me to supply myself with a spring lancet and a hypodermic syringe. I well remember my thoughts about it. I could see some use in the hypodermic syringe, but none in the lancet; but being accustomed to obey, I bought it." He has used it, too, and prizes it above all price. Let us pause here to reflect on this: eleven years ago, and ever since, the teaching there has been *silence* in regard to this important mode of subduing inflammation, or *denunciation* of it. The teaching had been of a kind to make this young man and hundreds of others feel that it would be little better than murder; and these boys who were prepared to operate to remove an ovarian tumor or a stone from the bladder, were utterly ignorant of the art of opening a vein. How fearful has been the result of such teaching! Fifteen years of fearful mortality in a curable disease. Nor has it ended yet. Since the second of my papers was published, the young, ambitious, and useful Dr. Darrach, of Germantown, in the very bloom and vigor of manhood, was struck down; in three days after visiting a patient, when in his usual health, he was a corpse. So, too, one of the most prominent politicians of our county, an able and valuable man, passed away after a brief illness from pneumonia. I know enough of the treatment to know that the lancet had no agency in producing these sudden deaths, and that arterial sedatives, and stimulants, and food were urged most unremittingly. Sad as I am to record these deaths, and strong as is the desire within me to discourse more at length on the fatal mode of treatment in vogue, not only in Philadelphia, but all over the country, and which the eminent Professor Gross has not been able to bring into disrepute, although he has so well proved its danger, I shall pause here to give to your readers the views of Dr. John L. Atlee on the value of blood-letting in inflammatory diseases. No physician conversant with the history of medical and surgical science in this country needs to be told of whom I am now

speaking. Take him as surgeon and physician combined, and he is the equal of any living man in all our vast country. Sixty years of continuous practice at the bedside of the sick has given him an experience which only the ignorant and presumptious will disregard. Hear him!

"My Dear Dr. Corson—

"I have read with very great interest your communications in the Medical and Surgical Reporter upon the treatment of pneumonia and kindred inflammatory affections. They accord so fully with my experience, more especially in the earlier period of my professional career, that I feel it my duty to give you some of the results.

"And first let me say what has often been said before, but which daily experience strongly confirms, that 'the *fear* of debility has caused the death of thousands.' It may be true that within the period of the last half century our constitutions have undergone so great a change that what was formerly considered strictly antiphlogistic treatment in acute inflammatory diseases cannot, with safety, be adopted; that a 'sthenic' course is imperatively demanded; and that instead of direct depletion by venesection, local depletion, purgatives, cold applications and absolute diet, we must use those *medicines* which control the action of the heart; partially paralyze the nervous centres for a time; and to prevent debility, give diffusible stimulants, abundance of food, quinine, nux vomica, etc., etc.; and this at a time when the functions of digestion, assimilation and nutrition are measurably suspended. *Indirect* debility is mistaken for *direct*. We must relieve the already overladen horse by additional burdens!

"I must admit that since the advent of the cholera, in 1832, and more especially the influenza of 1847, there has been a change in the character of acute inflammatory diseases, which was not met with before; but I am as well satisfied that it is not so great as to proscribe, to so great an extent, those remedies upon the employment of which we thought the lives of our patients depended; nor do I think that the mortality has been diminished, but, on the contrary, increased, by the change.

"I cannot believe that the loss of from ten to twenty ounces of blood in the commencement of an acute disease—as, for instance, pneumonia, when the blood is driven into the delicate tissue of the lungs, already filled to repletion by the previous congestion; which loss will not only relieve the congestion, but lessen the reaction, by weakening the power of the heart—can produce as much real debility as the progress of the inflammation will do if we endeavor to control it by less decided and efficient remedies. It is disorganization and not real debility and exhaustion we have to fear; and it is organic lesion which is the cause of death in a vast majority of fatal cases. Post-mortem examinations prove this. In the early stage, with a full-corded pulse, there is no substitute for the lancet; and, in my own experience, I have found it, during the chill, or congestive stage which precedes the inflammatory reaction, to cut short the disease and rapidly restore the patient. In high febrile excitement it *unloads* the system, restores the suspended normal secretions, and awakens in it the dormant susceptibility to the effects of our medicines.

"Many years ago I was sent for to consult with a physician of large experience and of eminence in our county, in the case of a brother physician who had been ill ten or twelve days with an attack of bilious remittent fever, which was then very prevalent in his neighborhood. The attending physician wished to treat the patient as he had successfully done in other cases, by bark, as quinine, but he refused to take it and insisted upon the lancet. To decide between them I was called upon. I found the patient excessively pale and emaciated, with a small but corded pulse, complaining of excessive pain in the head, and saying that it felt as if it were surrounded with an iron hoop and somebody was riveting it on. He said he was certain the bark would only increase the difficulty. Upon consultation it was decided to support the patient in bed, in the sitting position, open a vein and bleed him until he fainted. This was done; as soon as he recovered, he exclaimed, 'Oh, Doctors, how good I feel!' The symptoms at once assumed a more favorable character, and after prescribing the necessary adjuvants, we left him. Two days afterward I visited him again, some sixteen miles from this city, and we found that for thirty-six hours he had remained free from pain, but that shortly before my arrival the severe pain in his head had returned. We sat him up in bed and bled him to fainting a second time. This was the end of it; he had no more fever, and had a rapid recovery. The *fear* of debility from venesection would have prevented its use, and the result might have been fatal.

"Some years after that I had a severe attack of bilious fever, from sleeping incautiously in a miasmatic locality. It was attended with intense pain in the head, and a feeling like that of my good friend, Dr. L., as if it was surrounded by an iron hoop and with every pulsation of the heart being riveted on. I sent for a physician and requested him to bleed me until I fainted. This required the loss of twenty ounces of blood, and was followed by prompt relief. Before the physician, who was engaged in conversation with my wife, had left the room, and almost as soon as reaction commenced, I felt a return of the same distressing pain. I requested him to tie up my arm and reopen the orifice. After losing ten or twelve ounces more I fainted again, and this was the end of my suffering. There was no return of fever, and the debility was not greater or more permanent than in my other fever cases where similar and apparently debilitating treatment had not been adopted. It is not unlikely that veratrum viride and quinine, etc., etc., would have restored me; but I would have suffered more and been less promptly relieved.

"I have bled in the cold stage of obstinate intermittents, with the effect of breaking up the paroxysms and preventing reaction, and with the relief of all the symptoms which usually accompany a regular attack of that disease. And could we but see our patients in the congestive stage of inflammatory diseases, and use the lancet before reaction commences, I believe that

many fatal cases might be prevented. How often do we not see epistaxis, and to a very great extent, prove critical and curative in the early, as well as the advanced stage of acute disease.

"Should any doubt arise as to the ability of the patient to bear the loss of blood, where the symptoms would indicate its propriety or necessity, we can do no harm by placing the patient in an upright position, opening a vein and watching the result. This I have repeatedly done, and I have never known mischief to come from it."

JNO. L. ATLEE.

Lancaster, Pa., April 5th, 1881.

Such is the testimony of Dr. John Atlee, and it is in exact accord with the testimony of his renowned and lamented brother, so emphatically declared in the meeting of the State Medical Society, at Easton, in 1875. After the publication of my second paper on pneumonia, the venerable Dr. Ezra Michener, one of the oldest and most eminent practitioners of Chester county, published an article in the *Country Practitioner*, of New Jersey, in which, after favorably referring to my article, he bore the most unqualified testimony to the value of blood-letting in all inflammatory affections; and while he admitted that there is an asthenic diathesis which debarred the present generation from using venesection and other measures of years ago, he has discovered that it is in the doctor's brain and not in the patient's body. I regret that space will not allow me to quote further from his valuable paper, which created a desire in Prof. Gross to corroborate his views, and impelled him to send his address on the "Lost Art" to the editor of the *Practitioner*, for publication. In a note to the editor he says: "From this paper you will see that Drs. Corson and Michener are not the only medical men who believe in the value of the abstraction of blood as a therapeutic measure. For, in the course of lectures which I annually deliver in Jefferson Medical College, I dwell with much force and emphasis upon the employment of the lancet in the early stages of inflammatory affections involving important structures before they have been overwhelmed by inflammatory exudations. *I wish to God that it was in my power to write this sentence, in letters of fire, upon the brain of every practicing physician and surgeon in the civilized world.* (Italics mine.)

"I have read Dr. Michener's article with much pleasure; it is a timely appeal to the common sense and judgment of practitioners, and I trust its warnings will receive attention."

With what appalling force these declarations of Doctors Atlee, Gross and Michener must fall on those who are losing patients with an illness of only a few days, and who stubbornly refuse to listen to the teaching of those earnest, able, and conscientious men who have handled and vanquished this disease countless times during the last half century. As I write memory brings before me the sudden deaths of Morton McMichael, Judge Cadwallader, Mr. Powers, and other prominent men, the pride of your city, suddenly carried away by a disease as certainly curable by proper means as almost any other, and which has no terrors for a physician who can use the lancet. But a few days ago an estimable lady, the wife of an eminent professor of Philadelphia, was swept away after a brief illness; and the papers have heralded the death of Rev. Dr. Vinton, from the same malady. I quote from the published statement of his illness.

"He arrived in Philadelphia on Wednesday evening, and on Thursday preached a sermon at the consecration services of the Church of the Holy Trinity. He was apparently in his usual robust health, but rose on Saturday morning feeling unwell. He was attended by an excellent physician, and subsequently, by a second. His disease proved to be pneumonia, and rapidly developed itself, with very alarming symptoms, and although accompanied with every possible aid of skillful medical and other care, terminated fatally." From this it appears he was well till Saturday morning, then rose "feeling unwell." A physician was called, and later, a second, and at 4 o'clock on Tuesday morning he died. His whole illness less than seventy-two hours.

But what of the treatment? Of it we have not a word. Can it be possible that the experience and advice, and earnest utterances of Dr. Gross, their revered colleague, who wished it was in his power to write his teachings, in favor of blood-letting in such cases, in letters of fire, on the brain of every practicing physician and surgeon in the civilized world, were disregarded? I tremble before the dread responsibility which, as physicians, we assume, and knowing how I have erred, will not arraign others, but entreat them to listen to the teachings of successful experience.

It does not satisfy me to be told that this or that skillful man was in attendance, and therefore I should rest assured that the best had been done for them. Let us hear the details of the illness and treatment of the many prominent citizens who have been snatched by Death from their families, while the physicians who so strongly condemn depletion by blood-letting, and boast so loudly of the potency of "antagonistic remedies," stood helpless and cowerin

before him. Histories of these cases would be more valuable to physicians in private practice, in city or country, than the "hospital reports" of cases of pneumonia in men and women whose debauched lives and dissolute habits, and whose long continued use of stimulants, have made them unfit subjects for such treatment as is imperative and so efficient in ordinary private practice. And here, I am bold to say, is the source of this fatal practice, which has spread with such fearful effect over our country. In all the great cities, the medical schools have medical control of the patients gathered in hospitals, and the practice thought to be efficient in these people, breathing the polluted air of their crowded homes, is daily proclaimed to the students, and by them carried to every section of our land.

Can it be, that in the presence of this great mortality, and the sorrow of homes made desolate, this stuffing, stimulating treatment, this exhibition of arterial sedatives with one hand and "heart tonics" with the other, shall go on, regardless of results?

In this effort to defend the treatment of acute inflammatory disease by blood-letting from the assaults made upon it by those who are ignorant of its efficiency, I have sometimes made aggressive war on the assailants, and have even wounded some of them; but if in doing so I have caused them to see the widespread and fatal results brought upon society by the reckless use of the weapons which they have wielded, or their ignorance of better, surer means of relief, I shall be paid for my labor, and society be relieved from its present fear of blood-letting.

A CASE OF ACUTE MILIARY TUBERCULOSIS.

BY H. W. RIHL, M.D.,
Of Philadelphia.

Mr. C., aged about 28 years, was tall and well proportioned; though vigorous-looking, he was languid in his manner, and was one of those to whom work seems always a burden rather than a pleasure. In the two or three years during which I was his family physician I had attended him several times. First, in June, 1879, I had prescribed bromide of potassium for paroxysms of what I supposed to be epilepsy. I had had no opportunity of seeing him in any of these, and was, therefore, compelled to make my diagnosis from the rather vague description given me of his symptoms on these occasions. After taking the bromide he was much improved, and my impression is that there was no recurrence. In July, 1880, he had intermittent fever, which lasted but a few days. In the same year, from September 4th to October 24th, he was under my care for a very severe pleuro-pneumonia, which involved the inferior half or two-thirds of the right lung, anteriorly and posteriorly. Some time after his convalescence, he resumed work at his trade—that of a printer. March 14th, 1881, he complained of weakness and cough. I was not at that time able to discover any disease in either lung.

On the 15th of last April I was summoned to attend him at his residence. He informed me that he had not been working for some time. He was confined to his bed, complaining of a very severe pain over the seventh rib, on the right side, about the point of union of the bone with its cartilage. There was little if any redness, and no swelling, but the pain was described as being exceedingly severe, persistent, and increased on the slightest pressure. It did not appear to be pleuritic, but directly under the skin. I questioned him very closely as to whether he had received a blow, or had fallen; but he was positive that he had not; that the pain had commenced a few hours before, and that he could not account for it. He was free from headache, and, with the exception of this pain, felt as well as he had for several months, though during that time he had not been strong enough to work. The pain was relieved by morphia, which he was obliged to take for three or four days, when a new train of symptoms made their appearance.

On my fourth visit, April 18th, my patient informed me that since my previous visit he experienced difficulty in moving his left arm. On examination I found partial paralysis of left arm and hand. This became worse, till, on the 22d, paralysis was complete—sensation as well as motion being much impaired. The left leg had also become paralyzed, but never to the same extent as the upper extremity. After my visit on the 18th (the day of the commencing paralysis), his wife called on me, and said that she could now give me the explanation of his trouble; that it had not occurred to her before, but that in a conversation with her husband that day they had recalled a circumstance which was a key to the whole difficulty. Three or four days before my first visit, she and her husband were in a crowded car; Mr. C. was standing, holding on to the strap. As they neared a point where the car turns westward he braced himself to encounter the shock of the curve; but instead of the car turning, it was drawn ahead, off of the track.

The concussion was so great that he was thrown some distance in the car, and became very sick. He returned home, and next day felt no further inconvenience, so that he had forgotten all about it till now. I told the family that where cars propelled by steam came into collision, troublesome nervous symptoms often resulted, but that I could not conceive that such could occur from a slight concussion in a street car, crowded as it was, unless there had been a previously diseased condition of the cerebral blood-vessels, when a slight cause might hasten the catastrophe which, sooner or later, would have happened without it. As the case became more grave I was inclined to consider this view as at least plausible.

The paralysis continued without much change till May 2d, when I commenced using Gaiffe's electro-magnetic battery. The improvement was rapid, and both arm and leg, in about eight days, regained much of their former power, so that patient was able to use his hand, and also to walk. For a few days the prospects of recovery became very bright; he was comfortable in every way; slept well and had a good appetite, and fair pulse. This apparent improvement lasted but a brief period. On the 15th I noticed, for the first time, that he had fever. I regret that I have not noted as often as I would now like, the condition of his pulse and temperature. From this time he grew rapidly worse. On the 17th I found him alone. On asking him how he felt, he made no reply to this, nor to several other questions. After a few moments he answered in monosyllables. As I was passing out of the door, he called me back and begged me not to be offended because he had not answered me at first, and gave as a reason, that he could not collect his thoughts. On my next visit, his wife informed me that he sometimes conversed without difficulty, and at others could not speak at all. He now seemed to have lost all power of sitting up or of using his limbs. On being placed on a chair he pitched forward and was utterly powerless to assist in getting in bed. On the 22d he had involuntary evacuations, which continued until the time of his death. On the 24th I noticed bronchial râles for the first time, on the right side. On the 26th Dr. Mills saw the case with me. I had stated to the family that there had been probably a cerebral hemorrhage. Dr. Mills took the same view, adding that meningitis of the convexity had probably followed a slight hemorrhage into or beneath the pia mater. Whether the hemorrhage had been caused by the jarring of the car, or not, was uncertain. May 27th, pulse 108; temperature 104° in the morning, 103° later in the day. May 29th, temperature 104°; urine contained a little albumen, a few granular tube casts, and granular epithelium; sp. gr. 1.020. On May 30th Dr. Mills again saw patient; his symptoms now bore a striking resemblance to typhoid fever; sordes about the teeth; low, muttering delirium; involuntary evacuations; slight bronchial râles; high temperature; frequent and feeble pulse; nothing but the rose colored spots and the previous history wanting, to make the likeness complete. On 31st temperature was 104½°, and on June 1st he died. June 2d a post-mortem was made by Drs. Mills and Eskridge, which revealed, as Dr. Mills will inform you more particularly, tuberculous deposits in brain, lungs, spleen and kidneys.

We are sometimes able to read articles which reflect much credit on our superior acuteness in diagnosis. You have probably already drawn the inference that such was not the object of the present paper, for though so many organs were diseased, and to such a great degree, I was at sea in regard to them all, perceiving no trouble in the lungs but the bronchial râles, nothing of the diesease of kidneys and spleen. All that I did know was that the brain was subjected to pressure, and the history given by the patient led me to consider the shaking up he had received as at least a plausible factor.

Even in the light of the post-mortem there are some features which still seem mysterious. One of these is the seemingly trivial nature of the disease at first, viz: the circumscribed local pain over the rib, not more than a couple of inches in extent, and in which no lesion was discoverable after death. Then how to account for the rapid disappearance of the paralysis after the use of electricity? Would this indicate that the paralysis was not owing directly to the pressure of the tubercles, but indirectly to the effusion of serum incident thereto, and the electricity caused the absorption of the latter?

The duration of the illness was six weeks. Roberts says the "usual duration is from two to eight weeks," that "no marked *physical signs* in connection with the lungs can be detected," and that it "may closely resemble typhoid fever." I will add, in answer to remarks made on this case, that dyspnœa was not marked till a few days before its close, and that there was not, till later in the case, a very frequent pulse, nor much cough.

NOTES OF THE POST-MORTEM EXAMINATION, AND REMARKS BY DR. CHAS. K. MILLS.

The skull was a little thinner than usual, especially in the parieto-temporal region. The dura

mater was adherent, at several points, to the skull-cap. On dissecting the dura of the convexity from the pia mater, they were also found adherent at several points, on both sides of the longitudinal fissure, in the postero-frontal and parietal regions. An irregular area of yellowish exudation or deposit, with more or less adhesion, was found between the membranes on the right side. This area was about five inches in length, along the median edge of the right hemisphere, in the postero-frontal and parietal regions, as already described, and converged to a point about one-and-a-half inches above the posterior third of the horizontal branch of the fissure of Sylvius, forming a somewhat irregular triangle, with its longest side along the median edge. The exudation was in patches in this district, and also extended downward in spots, on the median face of the brain, to the corpus callosum. A similar condition, but less marked, was found close to the median edge and on the median surface of the left hemisphere.

On stripping the pia mater of the right hemisphere, adhesions were found at points corresponding generally to the area of disease between the membranes. The region of the cortex involved in this adhesive inflammation was as follows: the upper half of the ascending frontal convolution, the posterior half-inch of the second frontal, posterior two inches of the first frontal, and one-and-a-half inches of the gyrus fornicatus.

On stripping the pia mater of the left hemisphere, it was found adherent above only along the median edge, but was irregularly adherent along the median surface down to the callosomarginal fissure.

No lesion was found at the base.

On examining the ventricles, ganglia and centrum ovale, the only lesion found was a small, hard, yellowish mass, in the posterior outer third of the right optic thalamus.

The right lung was adherent to the diaphragm and walls of the chest. The left lung was also adherent, but to a less extent. Both lungs were infiltrated with miliary tubercles.

The peritoneal covering of the spleen was studded with what appeared to be miliary tubercles.

The left kidney was small; and both in it and the right kidney miliary tubercles were found.

In the ileum, not far from the cæcum, was a small patch of ulceration.

After reading the notes of the post-mortem, Dr. Mills remarked that he had seen the case only a week before death, and had allowed himself to be led, somewhat by the history, to consider the condition of the brain only. His diagnosis had been meningeal hemorrhage, with inflammation of the meninges and exudation spreading from the original lesion. He had very positively indicated the *seat* of the brain lesion before death. The palsy was brachio-crural, *i. e.*, it involved the arm and leg, but not the face, of one side, which indicated the cortical motor region of the brain as the part diseased, in particular, the arm and leg centres. The partial recovery under treatment also pointed to the cortex as the situation of the lesion.

Dr. M. made a sketch of the brain upon the black-board, showing the principal convolutions of one side, and Ferrier's centres for the muscles of the leg, arm, speech, etc.; then outlining the chief deposit in the present case, he demonstrated how it confirmed the theory of localization in each particular. The anæsthesia might perhaps be accounted for by the small lesion found in the optic thalamus. He thought the present to be one of those rare cases of primary tubercle in the brain, with secondary involvement of the other organs, but with no demonstrable connection with the supposed injury.

Dr. Hall exhibited sections of the various organs under the microscope, showing the tubercles, and remarked of the specimens of the brain, that the disease deposit was limited to the surface, not following the vessels into the brain substance as much as usual in tubercular meningitis.

Dr. Eskridge thought it would be useful to recall the usual signs of miliary tubercle, as given in the text-books, in the light of such a case. We have absent the usual forerunning lung difficulty. The temperature vacillating and irregular, very high and very low, accompanied by profuse perspiration; these were all absent in this case. Pulse generally rapid or intermitting, not found. Respiration rapid, with bronchial râles; the râles alone being present in this case. Emaciation more rapid than the amount of fever indicates; which corresponded with that found in this case. Lastly, the ophthalmoscope, which seems to have been neglected in this instance, sometimes shows tubercles in the choroid, or an optic neuritis, when the disease is basilar.

Dr. Walker thought the diagnosis as regards the brain lesion a rather brilliant one, as the precise seat of the disease and its exact size was mapped out before death. Regarding the tuberculous nature of the deposit, and the involving of the other organs, he did not think a diagnosis possible under such conditions.

Dr. Beates said that the pathology of tubercle was sufficiently well known to settle the question of primary seat in any given case. A simple inspection ought to distinguish the recent, translucent, pearly tubercle from the older ones that had undergone caseous degeneration.

A CASE OF SUPPURATIVE SYNOVITIS OF THE KNEE JOINT.

Read before the J. Aitken Meigs Medical Association, of Philadelphia.

BY H. H. FREUND, M.D.

Willie C., aged four years, a healthy looking boy, without any ascertainable hereditary taint, on the 9th of August last, while playing with a footstool, slipped on the floor, a corroded sewing machine needle piercing the right knee joint, to a depth of three-quarters of an inch, the needle breaking off abruptly, at the cutaneous surface.

The needle, more accurately speaking, entered the joint at a point about one-third of an inch above and to the outer angle of the superior border of the patella.

At the time of occurrence of the injury no immediate symptoms were presented, the child merely remarking to its mother that it had stuck itself; nothing more was evinced by the child until the afternoon of the same day, when the mother noticed a painful expression upon the child's face, and questioning him, he referred the seat of pain to the affected knee. On examination, the joint was found to be swollen, particularly at the point of entrance of the needle, somewhat reddened and very painful to the touch; the mother detecting a sharp point of resistance, and thinking she encountered a foreign substance in the joint, carried the child to a prominent physician, who made an incision (the child being anæsthetized) and extracted the offending part of the needle.

A few days later constitutional symptoms developed; the child's sleep was not prolonged as formerly; sometimes crying out during the night; it became fretful and irritable, with loss of appetite, heavily coated tongue, and constipated bowels. With these symptoms there was also an evening increase in temperature, though of a remittent type. Coincident with the increase in severity of the constitutional symptoms, the local manifestations became more aggravated. The joint was immobile, painful on pressure, and all traces of its outline were effaced. The patella was freely movable and buoyed up from the articular surfaces of the joint by a fluid. There was no enlargement of the superficial cutaneous veins, nor was there at any time œdema of the extremity below the knee.

This condition was kept up for nearly three weeks, when a fluctuating point was discovered one-half inch below and to the right of the lower border of the patella. An incision was made, and three ounces of pus of a healthy nature escaped, more glutinous than ordinarily seen, evidently due to unchanged synovial fluid. After the pus cavity had been evacuated, an exploratory examination was made with a silver probe, which was freely movable over the articulating surfaces, and which conclusively proved that the joint was affected.

The synovial bursa beneath the patella must have shared in the destructive process, judging both from the point of ingress of the needle and the point of fluctuation of the pus cavity. The abscess continued to discharge small amounts of pus, until about the middle of October last, when it became much diminished in amount, and soon after the opening closed. With this closure the local inflammatory symptoms were much decreased in severity, the child regained its appetite, the secretory and excretory apparatus were again doing their normal work, and the child entered on convalescence. An interesting part of the history I must not forget to mention. After the incision had been made which gave vent to the pus, a mass of tissue protruded from the opening; this mass was as large as an ordinary sized adult little finger, and three inches in length; the surface was of a greenish-yellow color, having a beaded or fringed appearance; it was cut off by the mother, not producing any flow of blood. This mass, in all probability, was a part of a detached synovial fringe. Fungous granulations made their appearance around the orifice of the pus cavity, growing so rapidly that they had to be excised a number of times; the subsequent application of a pencil of nitrate of silver effectually prevented further growth. The seat of the pus formation must have been the synovial membrane of the joint; the cartilages of the articulating surfaces must have remained intact, from the fact that, at the present day, the little patient has perfect use of the limb.

The treatment throughout the case has been of the simplest, and can be dispatched in a few words. After the incision had been made, which allowed of easy extraction of the needle, the opening was immediately closed with adhesive strips and liq. acid. carbolic, applied by means of a flannel roller. The limb was put on a posterior angular splint; thus the joint was kept at rest. Later on the lotion was changed to lead

water and laudanum, applied by means of a large sponge, which passed nearly around the knee, thus accomplishing a twofold purpose—the application of an astringent and anodyne lotion, and the pressure afforded by means of the sponge (which was kept constantly wet), the sponge being confined by means of an ordinary roller. At the onset of the constitutional symptoms laxatives were given, with a quinine and iron solution, combined with milk, light broths, beef tea, and small amounts of sherry wine, frequently repeated. Small amounts of potas. iodid. were given, for its absorptive qualities. After the inflammatory symptoms had subsided, and the opening closed, a silicate of sodium dressing was applied, which aided much in the treatment.

To-day the child is in excellent health; it has regained its former vivacity, eats and sleeps well, and no inflammatory symptoms are visible. The patella has approximated its articular surfaces. He walks very well, and a casual observer would not recognize any defect in his gait.

PERMANENCE OF THE SCARLATINOUS VIRUS.

BY GEO. T. JENKINS, M.D.,
Of Keokuk, Iowa.

There has been a great deal said and written about the spontaneous origin of scarlatina, some claiming that unhygienic surroundings, sewer gas, filth, etc., may produce it, while the great majority of intelligent medical men believe the only source of origin is contagion. I have had physicians of large experience tell me they did not believe scarlet fever was contagious, but when I would present examples of its undoubted contagiousness, they would say, oh! well, they admitted it was epidemic, and this was as far as they would go.

It is nearly the universal testimony of recent authors and clinical investigators, that this disease is not only epidemic and contagious, but also that its contagious principle possesses very great permanency. There are several instances given by Dr. J. Lewis Smith, in his excellent work "On Diseases of Children," where the scarlatinous virus has remained in houses for months, notwithstanding careful disinfection was observed.

Sir Thomas Watson narrates an instance in which a strip of flannel remained contagious for at least a year, and Hildenbrand was infected by a cloak which, after exposure to the disease, had been put aside for eighteen months; hence we may assume that the morbific principle of scarlet fever is anything but volatile and unstable. I believe it is in consequence of the very great permanency of the scarlatinous virus that we have so many instances of the apparently spontaneous origin of this disease presented to our observation. We are unable to trace the source of contagion, either on account of our careless and superficial investigation, or its obscure manifestation, hence we conclude that it occurred spontaneously.

These thoughts were forcibly presented to my mind by a case that has recently come under my observation, which I deem of sufficient importance to be reported. I was called, on February 9th, 1882, to see Philip M., a child two years old, in consultation with Dr. Payne. The Doctor informed me that he had been in attendance upon the child for the past two days, and that his diagnosis was anginose scarlatina. The symptoms were characteristic and decided, and I unhesitatingly confirmed his diagnosis. The child died on the thirteenth day of the disease. The important point is the source of infection. It seemed obscure, and the parents insisted that the child had been nowhere to "catch the disease." It was the only child in the family; had not been away from home; there were no cases in that part of the city, and only three mild cases anywhere in the community, and in those contagion was easily established as a cause. We ascertained the fact that they had lost a child two years before with scarlatina, and that the child was just the same age of this little fellow. This led us to think probably some of the clothing might have been laid away without disinfecting, and saved till this child got to be about the same age and then put upon him. Upon inquiry we were told the child had worn none of his brother's clothing recently. When we called the next day, however, the mother exhibited a little woolen cap and said this was the only article of clothing that the child had worn recently that belonged to his brother. After further investigation we found that the child that died two years before had this cap on when he was taken sick, that it hung in the room during his illness, and that after the funeral it was put away in a closely covered tin box, without disinfecting. The box was air tight, and the cap had never been out of it until three days before our little patient was taken sick, when he wore it to a neighbor's and out on the street.

Both Dr. Payne and myself were fully satisfied, from the above circumstances, that the scarlatinous virus had been kept in that cap for two years. Why might it not, under the same careful process, be kept for ten years?

Hospital Reports.

PENNSYLVANIA HOSPITAL.

CLINIC OF JAMES H. HUTCHINSON, M.D.

Reported by Wm. H. Morrison, M.D.

Eczema of the Hands from Local Irritation; Bright's Disease, Complicated by Erysipelas of the Lower Extremities; Dropsy from Cardiac Disease.

Gentlemen:—Before bringing in any new cases, I shall show you a patient whom you saw last week, suffering from an eczematous condition of the hands, the result of having exposed them to an irritant. He was employed in cleaning out barrels which had contained fat. In doing this he used a strong solution of potash; this irritated the hands so much as to give rise to this marked attack of eczema. This does not really differ from the condition as it is sometimes seen in other occupations; for instance, it is not uncommon to have among grocers an eczematous condition of the hand, often called "grocers' itch." This is not due to the presence of an insect, but to irritant substances which they handle.

You will notice that the left hand has improved considerably under the treatment which has been employed. Last week it was swollen, the skin infiltrated, and there was a tendency to exude a thick, tenacious fluid. The condition of the left hand was at that time similar to that which we now see in the right. I first used starch poultices. In this condition the application of starch is often followed by great improvement. After the acute stage is passed we may use ointments, but to employ ointments in such a condition as we have in the right hand would do harm, for the ointment would soon become rancid, and act as an additional irritant.

In regard to constitutional treatment. It is, of course, questionable whether or not constitutional remedies are necessary where the disease is only a consequence of a local irritation, but thinking that, at all events, it would do no harm, I have put him on the use of Fowler's solution, five drops three times a day. It is well to order it to be taken immediately after meals, in fact, during the meal. Under these circumstances it is much less liable to produce nausea and vomiting.

The patient is doing very well, and in another week the right hand, will, I have no doubt, be in the condition of the left hand. Oxide of zinc ointment will be employed on the left hand, the starch poultices on the right, and the internal administration of arsenic continued.

BRIGHT'S DISEASE COMPLICATED BY ERYSIPELAS OF THE LOWER EXTREMITIES.

I shall now bring before you a case which I learn has been made the subject of a lecture by my colleague, a few weeks ago; but as his symptoms have somewhat changed since then, I thought that it would be instructive to bring him before you. He is fifteen years of age, but certainly does not look so old. He has been in the house since January 18th. The history is not very complete, but the main facts are these. Last November, without any apparent cause, he began to have pain in the back. This continued for some time, and was occasionally accompanied by nausea and vomiting. Soon after, swelling of the feet and legs was noticed, and later, swelling of the face. I have no doubt that a careful examination would have shown that the face was first swollen. Shortly after this the whole body became œdematous. The patient was not confined to bed before he came into the house. His mental condition is somewhat impaired, and this has made it difficult to get a correct history of the case. Upon admission, the whole body was œdematous, the tongue was moist and clean, the bowels regular, the urine had a specific gravity of 1.020, and contained about three-fourths albumen, by bulk; *i. e.*, when the urine was boiled and the albumen allowed to settle, it occupied about three-fourths of the former volume of the urine. This is, of course, a rough way of determining the quantity of albumen, but for practical purposes it will answer. Upon microscopical examination there were found hyaline, granular and epithelial casts, and later some fatty casts.

My colleague placed him on pilocarpin, one-eighth of a grain, twice daily. During the first twenty-four hours after admission the patient passed twenty ounces of urine. On January 23d the bowels had been loose and he passed twenty-four ounces of urine. There was not much sweating, but the saliva was increased. On the 25th he passed thirty-eight ounces of urine. On the 30th, the day after I took charge of him, the quantity of urine had diminished, so that only ten ounces were passed; there was more œdema, nausea and vomiting; appetite poor; tongue coated and moist; bowels loose; legs more œdematous, and tender to the touch; hands also œdematous and some ascites. The pilocarpin was then stopped, and he was ordered infusion of digitalis, one drachm three or four times a day, and two drachms of the bitartrate of potassium, dissolved in a cupful of water, to be taken in the course of the day. The next day he passed more water, the œdema was somewhat relieved, and the patient was better. He was then ordered half an ounce of Basham's mixture three times a day.

The present condition of the patient, though still serious, is very much improved. You will notice that there is still œdema of the legs. This is, however, much less marked than it was ten days ago. You also notice on different parts of the legs an erythematous blush. This, also, was much more marked when I took charge of him. This redness has certain peculiarities. It does not shade off into the surrounding skin, but has a well marked border, and is tender to the touch. There is also a tendency to the formation of blebs. There is a large one on the left foot and several smaller ones on other parts of the leg. Again, we have a tendency for the redness, having appeared on one part, to leave this part and appear on another. This is not very common in the disease which I consider to be here present. In erysipelas, as it generally occurs, there is a tendency to spread, but it does not often leave one part and appear in another. There is one form of erysipelas (*érysipèle ambulante*) which is characterized by this tendency to skip; and there is another variety, *erysipelas erraticum*, or wandering erysipelas; but in this

case there has been, so to speak, actual jumps from one part to another.

We have then, in addition to the disease present when you last saw him, erysipelas of the lower extremities. Erysipelas occasionally occurs in the course of Bright's disease. You may recollect that when erysipelas attacks a person in a low condition of health, it is apt to affect the legs. Ordinarily the disease attacks the face, but in the great majority of such cases the patients are in fair general health; but in old persons and in persons debilitated by disease, erysipelas is prone to appear in the lower extremities. There is also, in œdematous limbs, a tendency to take on this inflammation. The fact that this complication may occur is an objection to certain methods of treatment which have been proposed to relieve œdema of the limbs. Acupuncture will often relieve the tension, but at the same time the little punctures which are made may be the starting points of erysipelatous inflammation. The œdema must have gone to a great extent, therefore, before I would recommend this plan of treatment. In this case the erysipelas appeared after the œdema had diminished. We find, then, a boy without a history of great exposure is attacked with pain in the back, nausea and vomiting, and shortly afterwards presents an œdematous condition of his lower extremities, followed, according to the history, by œdema of the face; but as I have said, if this patient had been living in a better class of society, the œdema of the eyelids would probably first have attracted attention. Œdema of the feet is often first noticed among people who pay little attention to their appearance, because the swelling renders the shoes tight. Although the history is silent on this point, it seems to me that this patient, most probably, either has been exposed to cold and wet, which in the great majority of cases is the exciting cause of the disease, or else, has had an attack of scarlet fever, so mild as not to attract attention. Bright's disease not unfrequently occurs after scarlet fever. I believe that in many cases where this disease follows scarlet fever the attack has been a mild one. I have now in my mind a case in point. A little girl had a very mild attack of scarlet fever; so mild that if I had not seen her at the very moment that I did, I should probably have failed to make the diagnosis. There were sore throat and fever, but the eruption was so slight, and continued for so short a time (for a few hours only) that I had a good deal of difficulty in persuading her mother that she had the disease. Two weeks afterward the patient began to pass blood; this continued for some weeks, and the Bright's disease, which was subsequently set up, continued for two or three years. I had begun to despair of the patient's recovery, when fortunately albumen disappeared permanently from the urine. Bright's disease may follow diseases other than scarlet fever. It may follow measles, erysipelas, occasionally typhus fever and diphtheria.

These symptoms, pain in the back, nausea and vomiting, and dropsy, all point to the kidney as the seat of the trouble; still these are not sufficient to make the diagnosis. I shall presently show you another case, in which there is as marked dropsy as here, but in which there is no disease of the kidney, or if there is any renal disease, it is secondary to the disease of the heart. I shall now test this patient's urine for albumen; first with nitric acid. It shows the presence of albumen very distinctly. You see a well-marked precipitate, which has the characteristics to which I have called attention on a previous occasion. It has a well-marked border above and below. It is as distinctly defined as if it had been cut with a knife; this is characteristic. We may have, from the addition of nitric acid to urine, a deposit of urates, but in such a case the precipitate is by no means so sharply defined as here, and it differs in appearance from this. I have before shown you how important it is to employ this test carefully and accurately. If I had simply poured the urine into the nitric acid, the precipitate would not have been so marked, and if I now agitate the liquid, the precipitate will be dissolved. By boiling we also have the precipitate. It is not as copious as it was two weeks ago. It does not now occupy more than one-sixth or one-eighth of the bulk of the liquid. Having obtained the precipitate by these two methods, we are pretty sure of the presence of albumen. Neither test is sufficient, but the two tests give definite and positive results. The urates may be thrown down by nitric acid, and the phosphates by heat, but the urates are redissolved by boiling, and the phosphates by nitric acid. It is also proper to take the specific gravity and the reaction, and to examine the urine microscopically. This has been done repeatedly in this case, and we have found well-marked casts. We have then, unquestionably, disease of the kidney.

It is necessary to examine the patient still further, to determine whether or not there is disease of any other organ. I have failed to find any disease of the liver, or of the heart. There has been heard at times a soft, systolic murmur over the base of the heart, but this is only a functional murmur, and due to anæmia. On auscultation, I hear œdematous râles over the lung. We have there the same condition that exists in the cellular tissue of other parts of the body. By very careful examination I can detect a slight amount of abdominal effusion. We have succeeded, then, not only in making the diagnosis of inflammation of the kidney, but also in eliminating any other disease as participating in the present condition of the patient. There is no other disease but Bright's disease present; there has not even been set up disease of the heart, which is so apt to occur in the course of Bright's disease.

This case may be said to be in the acute stage, just passing into the chronic. We have here the history lasting over a period of three months. We have, therefore, no longer an acute disease, but one becoming chronic. The condition of the kidneys is different from what it was in the early stages. They are probably less full of blood; they are paler, and probably present evidence of fatty degeneration. This is pretty certain, from the fact that fatty casts have been found in the urine. We have here a very grave condition. The patient, when I saw him for the first time, on Sunday week, was exceedingly ill. He had become much worse in

the few days during which my colleague was unable to see him. I found him with this erysipelatous condition of the lower extremities, suffering intensely with pain, exceedingly weak, œdematous and passing less water than natural. You remember that the treatment had consisted in the administration of pilocarpine. This appears at first to have produced a good effect, but after the remedy had been continued for a few days the good results passed away. When I took charge of the case it seemed to me not proper to continue this remedy. I am not quite sure that pilocarpine was indicated in this patient. In this disease there is a tendency to pass too little urine. Pilocarpine, by increasing perspiration, would have a tendency to still further diminish the amount of urine. It is therefore only in cases where the œdema is considerable, and where immediate relief is demanded, that pilocarpine is useful. The constant perspiration may have helped to bring on this erysipelas, which is certainly not a very common complication of Bright's disease in this house. I thought it better to put the patient at once upon diuretics. In Bright's disease the secreting substance of the kidney is diseased, and it may seem to you a questionable procedure to give the kidneys more to do; still, if you will consider the condition of the kidney, this objection will be found to be more theoretical than real. The tubes of the kidney are filled with debris which must be gotten rid of. This can only be done by increasing the flow of urine behind them, and thus washing them out.

I gave, therefore, cream of tartar, which is a good diuretic, in a large amount of water. Water is the best diuretic we have. It is rendered more diuretic by the addition of certain salts. I also gave him the infusion of digitalis, to act upon his kidneys, and also to stimulate his heart, which was feeble. Under this treatment he has improved considerably; the œdema has diminished in amount; he is able to lie down, which he could not do before, and the œdema of the lungs has diminished. I did not continue the cream of tartar, because it had a tendency to purge, and while purging is often an admirable way of getting rid of œdema, it is a weakening process. I then placed him on Basham's mixture, half an ounce three or four times a day. This is both a diuretic and also a tonic.

In regard to the treatment of the erysipelas. The iron in the Basham's mixture seems to have met some of the indications presented by this disease. The pain was so great that the limbs were wrapped up in laudanum and water. Lead water and laudanum would perhaps have been better, but this sometimes produces a deposit on the skin.

In reference to the prognosis. This is not very favorable. The evidences of disorganization of the kidney are very marked. The examination of the urine shows it; the general condition also shows it. He is, however, not beyond the possibility of improvement. We shall probably be able to effect a certain amount of improvement in his condition. We shall not be able, I think, to restore the kidneys to their former healthy condition. Such cases have been reported, but I have never had the good fortune to see them. I doubt very much if entire recovery ever takes place from this condition. Although all the other evidences of disease may pass away the albuminuria will still continue. Our views in regard to the presence of albumen in the urine have undergone considerable change since I was a medical student. When a resident in this hospital the presence of albumen in the urine was regarded as evidence of much more serious disease than now. We not only gave an unfavorable prognosis as regarded ultimate restoration, but as regarded life; but we now know that this is not the case. I know gentlemen in this city who are able to follow arduous occupations, who are active members of the bar, or active physicians, and who have had Bright's disease for a number of years and yet present little or no evidence of it: gentlemen whom, if you met them on the street, you would not suspect are the subjects of a serious disease. Recollect, however, that these men have a weak organ, and if they should be attacked by an acute disease of any kind, they would succumb more readily than a person who had not this disease. In other words, to use an illustration drawn from mechanics, "the strength of a chain is the strength of its weakest part," so that if a person with Bright's disease should contract pneumonia he would more readily succumb to it.

Let me here give you one caution: never allow a consultation to be called before you have examined the urine of your patient. This is an important point to recollect, unless you want to be mortified by its discovery afterwards, since very often the first question asked by the consultant is in regard to the presence of albuminuria.

DROPSY FROM CARDIAC DISEASE.

This is another case of dropsy, but the dropsy is here dependent upon a very different cause than in the last case. Dropsy is not a disease. Often, in the mortuary returns, you will see so many deaths from dropsy. This is only a confession of ignorance, since dropsy is only a symptom of disease. I show you, here, dropsy quite as marked, if not more marked than in the previous case, but in this man, examination of the urine at the present time does not show the slightest trace of albumen. The œdema of the lower extremities is very marked, with some tendency to the formation of blebs, but without any erysipelatous complication. The œdema extended considerably above the middle line of the body. The scrotum is distended. You will notice, however, that there is little or no œdema of the face. Œdema commencing in the face is generally attributable to kidney disease. Œdema beginning in the feet is just as often attributable to heart disease. In many cases we have disease of both organs combined. When we first examined this patient's urine, we found a specific gravity of 1.022, and a large amount of albumen (about one-third by bulk). This high specific gravity rather indicated that the albuminuria is dependent on disease of the heart. In disease of the kidney we have, generally, a low specific gravity, while in disease of the heart we often have a high specific gravity. I do not say that this is a rule without exception, but it will often help to distinguish the two diseases. No casts were found in this

man's urine. There were, then, no evidences of marked disease of the kidney.

Upon examining the heart we found the impulse diffused, rather outside of its usual position, and feeble. By percussion we have not been able to make out very definitely any enlargement of the organ. The reason of this is that the patient is the subject of emphysema of the lungs, which, consequently, cover the heart to a greater extent than normal. There is, however, no doubt in my mind, from the character of the impulse and of the sounds which are present, that we have enlargement of the heart with dilatation. As I listen over the apex, I hear very distinctly a systolic murmur. It is much obscured by the sonorous and sibilant râles which are heard in the chest and which are due to the œdema, but there is no question of there being a murmur. Yesterday, on getting him to hold his breath, I isolated the murmur very distinctly. I shall not ask him to do this to-day, as it brought on a severe fit of dyspnœa. The murmur is also heard at the left base of the heart, but not so distinctly. The same is true in regard to the right base. I do not think that this is a different murmur, but that it is the murmur transmitted from the apex, for it has the same characters and is much feebler. If there is any disease of the aortic orifice, it is secondary. There is no diastolic murmur; no evidence, therefore, of aortic regurgitation. We have here, then, a case of mitral regurgitation, mitral incompetency. A condition allowing the blood to regurgitate from the left ventricle into the left auricle, thus interfering very greatly with the circulation.

We have here a history of rheumatism. I shall rapidly read the history. "Family history is good. He had rheumatism in 1859. He enjoyed good health until one year ago, when, after exposure, he caught a severe cold, attended with much dyspnœa. This lasted for three weeks. Since then he has had attacks of shortness of breath. Six weeks ago he had an attack of dyspnœa. A few days afterward the feet began to swell. The dyspnœa has become more marked. The bowels are regular; the appetite poor. Lately he has been obliged to rise at night to pass water. No history of syphilis. He is anæmic and weak; pulse 110. The lungs are emphysematous and filled with râles. There is dilatation of the heart. The apex beat is diffused and most distinctly felt below the nipple. A systolic murmur is heard over the apex. The lower extremities are much swollen."

You will observe that the rheumatism occurred twenty-three years ago. It is very probable, from what we know, that the disease of the heart, which is now so prominent, occurred at that time. He then had, probably, some endocarditis, giving rise to the mitral incompetency. Why, then, has he not suffered before from this trouble? Because he has been in ordinarily good health. You notice that the symptoms from which he is now suffering began after an attack of cold. We have here an illustration of the fact I mentioned a few minutes ago, that a man with a weak organ is an unsound man. This man was not able to throw off this cold as readily as a man in perfect health, but instead, we have had an increase of the cardiac disease, as a result. You can readily understand that a bronchitis, which was probably the trouble which this patient had, would impede the action of the heart by interfering with the passage of the blood through the lungs. As long as the patient was in ordinary health he did not suffer from this disease of the heart but as soon as he became weak and debilitated, dilatation occurred and the symptoms that he now has began to appear.

We draw from this an important indication for treatment. We must try to restore him to his previous condition of health. The remedies required are not only those indicated by the disease of the heart, simply as such, but rather, those indicated by his general condition. Therefore, in addition to Basham's mixture and digitalis, indicated by the dropsy and the disease of the heart, I shall give him quinine, and later, if he can bear them, other remedies calculated to build him up. Cod-liver oil would be an admirable remedy, but I do not think he could bear it at the present time.

When the patient was admitted he was suffering greatly from the amount of the œdema, and in addition he had œdema of the lungs, causing great embarrassment of the respiration. The resident physician, very properly, placed him on purgative doses of elaterium. The object of this was, of course, to produce a copious discharge of water by the bowels. I have never seen it fail to give great relief where this condition is present. It is not a remedy to be continued for any length of time, because it produces great prostration. In the present case, in view of the urgency of the symptoms, the administration of this purgative was called for. At the present time the bowels are kept regularly moved, but drastic purgatives are no longer proper. I have placed him on Basham's mixture and the infusion of digitalis. Under this treatment he has improved considerably. I also gave him, in consequence of the condition of his lungs, the aromatic spirits of ammonia, as a stimulating expectorant.

In this case I made an unfavorable prognosis when the patient was first admitted. I hardly thought that he would live as long as he has. There has been, however, so much improvement that I hope he will become well enough to leave the house; but it is not likely that he will ever be able to do hard work again.

Tonic Pills.

The *Monthly Review of Medicine and Pharmacy* says the following tonic pills are much prescribed at the gynæcological clinic of the Hospital of the University of Pennsylvania:—

℞. Acid arseniosi,
Strychniæ sulph., ää gr. $\frac{1}{15}$
Ext. belladonnæ, gr. $\frac{1}{6}$
Cinchoniæ sulph., gr. iss
Pil. ferri carb., gr. iiss. M.
Et. ft. pil. No. j.

℞. Acid arseniosi, gr. $\frac{1}{15}$
Cinchoniæ sulph., gr. iss
Ferri et potass. tart., gr. ij M.
Et. ft. pil. No. j.

EDITORIAL DEPARTMENT.

PERISCOPE.

Puerperal Septicæmia.

Dr. J. S. Buck contributes the following case, illustrating the value of antiseptically washing out the uterus, to the *Medical Times and Gazette*:—

Mrs. M., married, aged twenty-eight, a multipara, aborted on Thursday, Oct. 27th, 1881. She was said to have been about three months pregnant, and was attended by a village midwife, who stated that "all the membranes came away whole," but that the patient lost a good deal of blood. I was sent for Nov. 1st. On my arrival I found her lying in bed, on her back, with her knees drawn up. Her countenance presented that peculiar sallow appearance usually seen in patients suffering from puerperal septicæmia. She appeared in a semi-conscious state. Temperature 104° F.; pulse 138, very small and thready. She had no lochial discharge whatever (this, I was informed, had ceased on Oct. 31st, the day previous to my seeing her). I ordered her one ounce of brandy every three hours, and gave her a mixture containing five grains of carbonate of ammonia, twenty minims of spirits of sulphuric ether, and one ounce of decoction of cinchona every four hours. On Nov. 2d patient seemed rather weaker, if anything. Temperature 104.4° F.; pulse 140, very small and thready. I continued the same treatment, only ordered the brandy every two hours, and repeated the chloral and bromide draught, as she had not slept. On the 3d, at 4 A.M., she had an attack of convulsions, which lasted about an hour, and in them she bit her tongue rather severely. At 2 P.M. she had another attack of convulsions, lasting about an hour and a half. On my visit she had a slight yellow discharge, which the nurse said smelt very badly. Temperature 104.4° F.; pulse 138, weak and thready. So I determined to wash out the uterus antiseptically. This I accomplished fairly easily, as I found the os uteri would admit the tips of two fingers nearly. I injected a quart of tepid, weak solution of permanganate of potash, which brought away a quantity of very offensive matter and shreds of membranes. I continued the brandy and ammonia treatment. On the 4th I was surprised to see the change in the patient. She had slept well without medicine. The pain in the abdomen which she complained of the day previous had ceased, her temperature had dropped to 101.6; her pulse was 120, much fuller and stronger, and she had had no more convulsions. I determined to give her another intra-uterine injection, which I did with some little difficulty, as I found the os somewhat smaller than on the day previous. I injected the same amount and of the same character, and brought away a few shreds of membrane, but it was not offensive at all. I ordered the brandy every four hours, and continued the ammonia and bark mixture. On the 5th she was much brighter and better. Temperature 101°; pulse 120. She slept well; no pain. I ordered the same treatment. On the 9th the patient was progressing well. Temperature 99.4°; pulse 96. She said she felt well and wanted to get up. I ordered her ten minims of dilute nitric acid and an ounce of the decoction of cinchona three times a day. On the 12th she was out of bed for about an hour. Temperature 99°; pulse 88; going on very well. 21st. Since the last note the patient had improved very much, and she is able to sit up all day. She takes her food well and sleeps well; has no discharge, and her temperature and pulse are normal. I have been giving her ten minims of the solution of dialysed iron three times a day, after food, and ordered her to continue taking it.

I think this case shows the good effects of antiseptically washing out the uterus in such cases. Dr. Playfair, in his "Science and Practice of Midwifery," speaks very highly of the practice, especially in those cases of "autogenetic origin," or self-infection as he terms them; and certainly, in my case, the effect was marvelous.

After Treatment of Lithotrity.

In a recent issue we furnished an abstract of a lecture by Sir Henry Thompson, on "Lithotrity at a Single Sitting." In continuance we can now furnish his remarks on the after treatment, which we glean from the *Lancet*: "When the patient has fully recovered from the ether, if suffering severely, say three or four hours after the operation, a condition which is quite uncommon, a hot hip bath, as hot as he can bear it for fifteen minutes, gives great relief. For the first three or four days the treatment will consist of recumbent position, external warmth, frequent hot hip baths, and small but frequent doses of solution of potash, to neutralize the acidity of the urine. If the urethra is over stretched or bruised, an india rubber catheter may be tied in for twenty-four hours or so; if the bladder had previously lost the power of emptying itself, such an inlying catheter for a day or two is better than frequent catheterism. It will sometimes occur, in the course of the most favorable cases, that on the fourth or fifth day a little excitement appears, the bladder becomes irritable, urine cloudy, and after twenty-four hours subacute cystitis is established, destined oftentimes to be troublesome for a week or two. To avoid this, great attention must be paid to the rest treatment noted above.

His proportion of deaths from the "*single sitting operation*" was only three per cent., while in four hundred cases, by the old method, reported to the Royal Medical and Chirurgical Society, the death rate was seven and one-half per cent. The mean age of the 101 men upon whom he operated was over sixty two years and a half. He thinks he is justified in concluding that the morbid condition of the bladder following lithotrity for uric acid and oxalate of lime calculi in previously healthy organs, occurs less frequently now than heretofore. In order to guard against

the danger, our first care should be to avoid in every case, where it is possible, the use of instruments, whether for crushing or evacuating, which over distend and irritate the urethra and neck of the bladder. Our rule must be not to employ larger instruments than the size of the stone demands. He cannot too earnestly warn the inexperienced operator against the needless risk he incurs when, in presence of a small or moderate-sized stone (and the majority met with belong to one of these two categories), he uses the heavy lithotrite and the large evacuating tubes which have of late been introduced into this country. In order to remove two or three hundred grains of calculous matter from the bladder—and many calculi weigh less than a hundred grains, while all ought to be found before they attain that weight—it is wholly unnecessary, I will even say it is unwarrantable, to introduce lithotrites and evacuators with the diameter of No. 18 or 20 English scale into the bladder. I am certain that the mere splitting, for it is not dilatation, of the urethra and neck of the bladder, which sometimes follows the introduction of such instruments, has sufficed to produce symptoms often distressingly painful, sometimes obstinate in duration, occasionally fatal. Surely it is more prudent to be stow two or three minutes more on the work, to ensure more complete crushing, so that the débris may be removed by a tube of 15 or 16 English diameter, than to crush coarsely and use an evacuator, which infallibly inflicts serious mischief in a certain proportion of cases.

I will briefly sum up our subject thus: Lithotrity completed at a single sitting is, in experienced hands, an operation unequaled in its safety for the patient.

It appears also to produce less subsequent persisting irritation of the bladder than the operation by several sittings.

No new form of instrument is required by this operation.

The value of the proceeding lies altogether in the removal of all the foreign matter from the bladder at once, so that nothing remains to excite inflammation, in an organ already irritated by the process. And the less irritating the operation has been, the more certain and more speedy will be the recovery.

It should be employed by beginners only for calculi of moderate size, when hard. If calculi are large, as well as hard, a young surgeon will probably proceed more safely by lithotomy. In friable phosphatic calculi size offers a much less serious difficulty. Lithotrity at a single sitting, for a hard calculus, upwards of an ounce in weight, and *à fortiori*, when double that weight, certainly demands an experienced operator.

Unusual Effect of the Sulphide of Calcium.

Dr. W. T. Alexander read a paper on this subject before the New York Dermatological Society (*Archives of Dermatology*), from which we extract the following: "Since the re-introduction to professional notice, by Ringer, Cane, and others, of the sulphide of calcium as a remedy for pustular acne, furuncles and other suppurative processes in the skin and glands, testimony as to its merits in these affections has been furnished by a large number of observers. But, in a very small number of cases that have recently come under my notice, the agent has seemed to exert an action so different from that usually ascribed to it in text books and communications to journals, that they seem sufficiently interesting to justify me in briefly reporting them." He then reports three cases. In the first, by mistake, the drug was taken in eight-grain doses three times daily, for several days. During this time the acne not only became worse, but several large, highly inflammatory, and exquisitely sensitive furuncles appeared on the wrists, forearms, and neck, attended with moderate febrile movement, gastric disturbances and diarrhœa. He then stopped taking the sulphide and the furuncles began at once to improve, becoming less painful, losing their inflammatory areolæ, and the previous purulent discharge from them ceasing. In the second case the drug was given in doses of one-tenth of a grain four times daily, for a small, indolent, painful, abortive furuncle on the back of the neck. In a few days, several large, intensely inflammatory, and very sensitive nodules appeared on the face, arms, and other parts of the body. As these symptoms were held to be simply manifestations of the original disease, the use of the drug was persisted in, the dose being increased. The furuncles became larger and more painful, until, finally, the patient having lost faith in the drug, it was abandoned, and she began to improve almost immediately, and was soon entirely well.

In the third case it was given in doses of one-fourth grain four times daily, with results precisely similar to the preceding two. That the pathological phenomena in these cases were not simply coincidences, but were due to the action of the sulphide of calcium, is rendered almost certain by the fact that recovery began in each of them immediately after the use of the agent was suspended. That they are not instances of drug aggravation is also rendered probable by the fact that in none of the cases was there any evidence of suppurative action in the skin before taking the medicine, and that this was a prominent element in all three of them after it had been taken for several days. Abundant testimony can be found showing the value of this agent in suppurative diseases, particularly occurring in the skin and its appendages, but that it is capable of *causing* such affections has been stated, as far as I know, by only one author. The most reasonable explanation of the pathological changes in these cases seems to be to attribute them to the influence of that indefinite and undiscoverable quality known as individual idiosyncracy or susceptibility to the perverse action of a particular agent, occasionally observed in practice.

The Sphygmograph.

The London *Lancet*, in an editorial plea for the more general use of the sphygmograph in private practice, thus well describes its merits. The height of the up-stroke made by the needle depends on conditions and methods of applying the instrument which deprive it of any significance, but its

direction, whether oblique or vertical, in relation to the rapidity of the movement of the paper, is of great suggestive moment. If the contraction of the left ventricle be free and the distribution of blood through the arterial system be unimpeded, the up-stroke will rise nearly at a right angle to the base line of the paper. If the impulse communicated to the blood-current by the heart be weak, or the vessels be rigid, so that they dilate slowly, the up-strokes will be oblique. Again, if the vessels be in a normal state and free, the down-stroke will commence with a sharp recoil at the instant of the subsidence or expiration of the force of the heart's action, as shown by the up-stroke. The juncture of the up-stroke and the down-stroke will therefore be acute. The rapidity of the fall shows the state of the vessels, as regards their rigidity. The contraction of the vessel, which is a reaction upon the dilatation effected by the impulse communicated to the blood-current by the heart, produces a second rise, generally half-way along the down stroke. This rise, which marks the arterial element of the pulse phenomenon, bears a relation to the up-stroke which is not affected by the mode of applying the instrument, and it is, therefore, of great value. The chief points of practical value which the sphygmograph shows may therefore be enumerated as follows. The force and freedom of the ventricular impulse in relation to the state of the arteries; the condition of the coats of the arteries in relation to the question of their rigidity or elasticity; the condition of the muscular coats of the arteries as indicated by the power of contraction possessed by the vessels and their excitability, as evidenced by the quickness and extent of their contraction as a reaction on the impression produced by the heart's action. This contraction is a true reflex acting through and in the vaso-motor system. The question of blood tension is also, as it were, raised, and partially, though not fully, discussed by the behavior of the needle of the sphygmograph. Enough, therefore, may clearly be learned by the use of this instrument to render it of high practical value even to the busy practitioner, and it is of interest to the progress of our art that it should be generally employed. The discredit into which it has fallen has resulted from the not unnatural enthusiasm of its introducers, who made too much of it, and exaggerated the importance, while they misconstrued the nature, of the lessons it has to teach, and the aid which, when rightly used, it can render.

The Nerve Element in Whooping Cough.

The *Lancet* says: Of late years the profession has bestowed very little, if any, serious scientific attention on some of the commonest of common maladies. Whooping-cough is conspicuously among the neglected ills to which, notwithstanding the forgetfulness of the multitude of earnest clinical investigators, flesh is still heir. Many years ago the nerve-element in this troublesome and too often evil-working, if not in itself dangerous affection, engaged much consideration, and treatment was specially directed to its relief. It would be well if the investigation of this feature of the etiology of the affection could be resumed. The fact that pertussis belongs to the class of maladies which are communicable and "catching" does not take it out of the range of probability that the specific action of a morbific poison on the nerve centres may be the efficient cause of the disease. Although the occurrence of the affection happening rarely more than once in the life of any individual may seem to point more directly to the fertilizing of latent germs in the organism than to any special excitation of the nerve centres, we do not, as yet, know enough of the *modus operandi* of morbific influences—"germs," or poisons as we may call them—in the blood and the tissues to define the part which the nerve centres play in the production of morbid phenomena. In any case, such relief is frequently obtained, even in the earliest stages of whooping-cough, from mild periodic counter-irritation over the whole length of the spinal column by a mustard poultice, which merely reddens the skin without vesication, that it would be well worth while to study this method closely from the therapeutic as well as the clinical standpoint. It certainly does good; but how? In cases where the mustard poultice, applied for six or eight minutes—not longer—over the whole length of the spine immediately before putting the child to bed, every night, for a week, or, in seriously spasmodic cases, a fortnight, does not procure a permanent amelioration of the cough, the effect of this remedy is enhanced by sponging the spine with iced water quickly, each successive morning. In cases where the paroxysms of cough seem to be repeated and to continue from sheer exhaustion of the nerve centres, coffee, administered as a drink, will often stimulate the energy of the centres so as to put an end to the malady. These are practical points which require theoretical explanation.

Delirium Tremens.

At a recent meeting of the Cambridge (Eng.) Medical Society (*Lancet*), Dr. Latham introduced the subject of the treatment of delirium tremens. He thought the subject offered scope for considerable difference of opinion, and was a suitable one for general discussion. He referred, first, to sleeplessness as a prominent symptom, and said that if sleep were obtained, recovery generally ensued quickly. Was the induction of sleep, then, a *sine qua non* in treatment? If sleep did not ensue, subarachnoid effusion and coma were likely to follow in some cases, while the majority might recover; but Dr. Latham thought the disease ought to be treated actively, and that dangerous remedies might be used with advantage to patients. He divided cases of delirium tremens into three classes: (1) Patients in moderate health who had used stimulants in excess; (2) those in robust health who had indulged after excitement or distress, chiefly young men; and, (3) those broken down in health, and with damaged organs. The first class he thought could be treated with opium, without risk, provided the urine was free from albumen; and he had been surprised to find albumen in the urine in a large proportion of cases without any other

indications of kidney disease, and the albumen disappearing as the patient recovered. If albuminuria existed, the use of opium or morphia could only be pernicious. The first thing to do was to give soup, beef-tea, and alcohol in nearly the accustomed doses for twenty-four hours, and then opium; having previously given, if necessary, a dose of calomel. He advised the hypodermic injection of morphia, first in half-grain doses, and then in doses of one-quarter-grain every half hour till sleep was procured or the patient was distinctly under its influence, as shown by the condition of the pupil. He believed diminution in quantity of stimulants taken by the patient to be an early symptom, and not a cause of the disease. In the second class he advised, not opium, but henbane. He had given bromide of potassium in forty grain doses every four hours, and found the tincture of henbane in doses of one drachm every four hours succeeded better. He also thought that Merck's preparation of hyoscyamine would be useful, but had not yet given it a trial. In the third class he thought opium should be given with great caution, and that the free administration of stimulants was important, even as large doses as those customary with the patient. He mentioned a case in which a gentleman, in his eager desire for insensibility, had taken 240 grains of chloral and the same quantity of bromide of potassium at a dose, and survived after very free action of the skin, bowels, and kidneys. He deprecated the use of large doses of digitalis, as suggested by Dr. Jones, of Jersey. Mr. T. Hyde Hills, speaking from his experience as a jail surgeon, thought leaving off stimulants was a cause of the disease, and that many prisoners became delirious after admission, owing to this deprivation. He advised giving the usual amount of alcohol to which the prisoner had been accustomed, and thought chloral of benefit. Mr. Hodson thought that the combination of chloral and capsicum was useful. Dr. Smith alluded to the usefulness of cold sponging of the body, as a means of inducing sleep. Dr. Latham, in reply, stated that he recognized the capsicum in confirmed cases; it was much esteemed in India. In young men he approved of Dr. Graves' plan of giving antimony and opium every two hours.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the eleventh annual report of the Philadelphia Dispensary for Skin Diseases.

—— "A Case of Prolapse of the Laryngeal Sac," by J. Solis Cohen, M.D., comes to us in the form of a reprint from the *Archives of Laryngology*, Vol. III, No. 1, January, 1882.

——"An Experimental and Clinical Inquiry into the Etiology and Distinctive Peculiarities of Traumatic Fever," by B. A. Watson, M.D. This comes to us in the form of an extract from the Transactions of the American Medical Association.

——"Preliminary Observations on the Pathology of Sea Sickness," by J. A. Irwin, M.A. Cantab., M.D. Dub., comes to us in the form of a reprint from the *Lancet*. In this pamphlet the author (who is preparing a work on sea-sickness) lays before the profession the substance of some novel views which he entertains upon the pathology.

——"Abortion and its Lessons," by O. E. Herrick, M.D., a reprint from the *Michigan Medical News*. In this article, the author takes the ground that when a good cause exists, abortion is justifiable. He considers injections used immediately after connection the surest means of preventing conception.

They should be used with a vaginal syringe, with a large speculum pipe as large as an ordinary glass tubular speculum, with the rubber bulb attached directly to the end of the speculum pipe and no rubber tubing intervening.

Plain water will not answer, but if carbolic acid is added to it, it will often prevent conception. After injecting the liquid, the rubber bulb of the syringe should be allowed to expand, when all the contents of the vagina will be drawn into it.

BOOK NOTICES.

An Index of Physiology. By L. Ashley Faught, D.D.S., late lecturer on Physiology in the Philadelphia Dental College, etc., etc. pp. 120. Press of Wm. H. Hoskins, 913 Arch street, Philadelphia. 1881. Price $1.00.

The author claims that this is the smallest book on physiology ever published, and we imagine he is right. In his title he modestly claims for his production the merits only of an index, and as such we can commend it. Those who can afford to buy it will probably not learn much that they do not already know, but a glance through its pages may assist them in their further study of the more elaborate volumes on the subject.

Home and Climatic Treatment of Pulmonary Consumption, on the Basis of Modern Doctrines. By J. Hilgard Tyndale, M.D., Member N. Y. County Medical Society, etc., etc. pp. 174. New York: Bermingham & Co. 1882. Price 50c.

This volume is a resume of the therapeutics of all progressively destructive processes of the respiratory organs which do not occur successively and rapidly in the train of acute inflammations of the lung. It is a good book, well worth the small price asked for it.

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SYPHILITIC CACHEXIA.

It frequently happens, more particularly in systems previously broken down by intemperance or neglect, that syphilis fails to run its usual course. Instead of (as the books tell us it does) eventually getting well of itself in time, after running an active course for some weeks or months, maybe a year or more, some of its manifestations will settle down into a slow, chronic, indolent condition, as it were, and will seem as though they intended to remain forever. Thus *lupus* may have been the chief outward manifestation of the disease. After some months these sores may degenerate into indolent ulcers, over the surface of which may form a hard, elevated, scaly scab, underneath which there is a constant secretion of pus, which, oozing out from some little portion of the scab, will repulsively soil the underclothing.

Or rheumatism in all the joints may remain, to remind the man of his folly, after all the outward manifestations of the disease have disappeared. There are numberless souvenirs of this disease that may exist in the chronic condition referred to, when, from collateral considerations, we have good reason to believe that the active specific poison has lost its virulence, or has been removed from the body. In such conditions, anti-syphilitic treatment, the various forms of mercury, the iodides, tonics innumerable, have all been tried, and yet the obstinate symptoms continue, as uninfluenced by treatment as though you had prescribed *aqua pura*.

If now you will use the compound decoction of sarsaparilla, made according to the Pharmacopœia, in a majority of cases you will derive astonishing results. This treatment of syphilitic cachexia, more particularly of syphilitic rheumatism, has been recently brought into notice again by a writer in an English journal, and it promises great things in this obstinate condition. We do not mean to treat syphilis with it, but do recommend it in this after condition. If chronic ulcerations exist, it will be necessary, in addition, to touch them occasionally with a point of lunar caustic.

This decoction contains sarsaparilla, bark of sassafras, guaiac wood, liquorice root and mezereon. To commence with, six ounces should be taken three times daily, and this may be gradually increased to eight or ten ounces. How it acts we do not, of course, know. Professor CARSON was wont to ridicule the idea of sarsaparilla purifying the blood, because he laughed at the idea of the *blood becoming impure*. Whether he was right or wrong we will not judge, but we can say positively that compound decoction of sarsaparilla is a very valuable remedy in syphilitic cachexia.

Not only will this decoction be found useful in the condition indicated, but it has also been frequently found beneficial in those indefinite conditions of ill health when no particular disease can be said to exist and yet the individual is not well. It has been found useful in the frequent slight derangements of the aged, and will relieve that condition of malaise so frequently supervening upon imprudence and excess in eating or drinking long continued, but where it has not yet produced any definite disease.

SCHOOL BUILDINGS.

From a report of the Board of Education of Cleveland, Ohio, we are glad to note that the sanitary construction of school houses is about to claim the attention that it deserves. Too much care cannot be bestowed on this important point. When we reflect that the majority of children spend the greater portion of their early active lives in school, it will be evident to all thinking men that these buildings should be so constructed as to remove all possibility of disease from bad sanitary arrangements. The majority of our private school buildings, in this portion of the country, are old; they were built at a time when but little thought was given to hygiene or sanitary science; hence, while fairly well constructed, they lack, at least the majority of them do, the appliances for preserving health that our latter-day acquaintance with sanitation renders possible. Our public school system in Philadelphia is one of our prides, and is excellently well organized; the buildings are large, handsome and commodious. But in some features they lack the very points toward which the Cleveland School Board are directing their attention. For one thing, they are very high, three and four stories. The Cleveland Board recommends two-story buildings. In order to carry out their reform, they have addressed a circular to architects, offering a premium of five hundred dollars for the best plan of a two-story school house, based on sound sanitary principles. For their guidance the following points are mentioned:—

1. Rooms of size to afford fifteen square feet of floor per pupil, that is, nine hundred square feet for about sixty pupils.

2. Window space not less than one-fourth of size of floor.

3. Height of room not to exceed fourteen feet.

4. Ventilation to introduce not less than thirty cubic feet of fresh air for each pupil per minute, and remove an equal amount of foul air, from the level of the floor.

5. Heating arrangement so connected with ventilation as to secure even temperature, that shall not differ materially in different parts of the room, and air to so enter as not to expose any of the pupils to unwholesome drafts.

6. Water-closet accommodation to be abundant, well ventilated, and the building thoroughly secured against sewer gases.

Realizing how readily inherited diseases lying dormant in the system may be roused into future activity by unhealthy conditions and surroundings in school, this action sets a good example, that all cities will do well to follow.

In Boston an active effort, with good prospects of success, is being made to secure sanitary inspection of schools. It cannot be too frequently urged upon the public, by physicians, that prevention is infinitely cheaper and much more satisfactory than cure. The large majority of human beings know but little and care less about hygiene. They regard it as a science beyond their comprehension, and pass it by. They should be taught that while the more intimate minutiae of sanitary science require, for their proper understanding, some knowledge of the science of medicine, yet there is a great deal that they can understand and that they ought to know. It will be much more satisfactory, in the long run, if, by proper precautions, children are kept healthy, than it will be, if by neglect of them they grow into semi-invalid men and women, burdens to themselves and to others.

PROFESSIONAL LIBERALISM.

View it as we may, there can be no doubt that in ethics the profession of medicine is much less conservative than it was a few years ago. Progress is so gradual that those who live during a period of changes fail thoroughly to realize them, since they come one by one, allowing time for custom to breed familiarity with the first before the second follows on its heels. If, on the other hand, the spirits of Astley Cooper, John Hunter, Chapman, Dewees, Jackson, and Physic, could return for a short time to their ever remembered localities and duties, think for a minute what they would see. Their eyes would become round with amazement, as they read of the utterances of distinguished English physicians, in favor of admit-

ting homœopaths to their consultations. They would see the wife of the distinguished editor of one of our greatest journals herself a distinguished and cultivated physician. They would stand aghast when they heard that the medical profession of one of the greatest States in the world had rendered it officially proper to consult with a sect, the members of which they, in their day and time, avoided and shunned, professionally, with as much or even more care and assiduity, than they did the devil himself.

They would find physicians in good standing officiating as teachers in medical colleges for women. They would be informed that several medical societies of repute had opened the door of membership to female physicians. In time their unsophisticated minds would awaken to the various devices used by their modern confreres to secure practice, and they would be almost paralyzed when they learned how much wire pulling and political intrigue had entered into their beloved profession.

We do not mean to say that this is not all right. We are champions of progress, and rejoice when we see human nature advancing. We merely desire to enable our readers to enjoy with us the real amusement that would be afforded by the puzzled and half incredulous expression that would occupy the faces of these old medical war horses were they enabled to see and hear what we do, and to watch them throw up their hands in astonishment, as they exclaim, "*By the shade of the great Hippocrates, but this is an age of progress,*" as they vanish from sight into the dim mist of uncertainty, born of their doubts as to whether all this seeming progress will redound, in the end, to the real and substantial advantage of their ancient profession.

Notes and Comments.

Cucumber or Carbolic Acid.

The *British Medical Journal* says: America is suffering in a very marked degree from the pollution of drinking water, which is so apt to be the Nemesis of the accumulation of great city populations, unless primary regard be paid to scientific sanitation, and especially to the supply of pure drinking water, as well as the preservation of purity in the soil and air. The drinking water of the great cities of America appears to be in some instances little better than sewage water, and in numerous cases the pollution of potable water in great cities is such as to cause, at the present moment, considerable disgust on the part of city residents, and to call for government intervention, which is unfortunately slow, and not always satisfactory in its action. From comparative results which have been published by Dr. A. R. Leeds, in the *Chemical News*, it would appear that the water at Newark, Jersey City and Hoboken had become suddenly noticeable for the highly marked flavor of carbolic acid, indicating that the pollution of that particular water supply was at that moment of an especially chemical nature. When the board was made aware of the nuisance, it was ingeniously urged that water was all the better for being polluted with carbolic acid, inasmuch as it served to disinfect the other kinds of filth which got into the drinking water. This plea, however ingenious, was not held to be good in law, and so, for the moment, the inhabitants of Newark, Jersey City and Hoboken have to drink their potable water without the preliminary disinfection, which made it more unpleasant to the taste, if less noxious to health. Boston is suffering from what is described as a striking and interesting and scientific peculiarity. Its drinking water shows albuminoid ammonia to the extent of 0.0605, a statement which analytical chemists and medical officers of health will read with grim surprise. It is stated, however, that the peculiar interest is, that this is due, first, to the pollution by a few manufacturing towns, and, secondly, to the growth of algæ. There is especially an extremely interesting and rare freshwater sponge, *spongilla fluviatilis*, which accounts for the peculiar "cucumber taste." It is thought that the Boston people would be more reconciled to the "cucumber taste" if they took a little more scientific interest in the *spongilla fluviatilis*, which is accordingly elaborately described and figured, and recommended as an object of interest under the microscope. Another source of pollution of the Boston water is Pegan Brook, which flows through a town of ten thousand inhabitants, almost entirely engaged in the dressing of leather and manufacture of shoes; the outflow from which factories is supposed to complicate the "cucumber flavor." Philadelphia and New York also, it appears, receive their water from polluted sources. The feeders which empty themselves into Croton Lake, the

principal reservoir of the New York water, pass through a settled country, with numerous tanneries, factories, etc., along their banks. Wilmington, Del., also ranks among the towns supplied with polluted water. Under these circumstances it is satisfactory that an energetic effort is promised to maintain the public interests and to protect the public health by improving the sources of water supply, and guarding them against contamination; and, meantime, it is not surprising that Apollinaris water is stated to have become so general a favorite in the United States, that its consumption there as a daily table water equals that of Great Britain.

Headaches in Children.

Dr. Day read a paper on this subject before a recent meeting of the Harveian Society, of London (London *Lancet*). He alluded to the two great causes of headache, from a pathological point of view, viz: cerebral anæmia and cerebral hyperæmia. He said that habitual headaches in children indicate an irritable and exhausted brain, and if intellectual exertion be carried too far in such cases, mischief is soon likely to ensue. If intellectual exertion be carried beyond a certain point, the brain becomes anæmic, fatigued, and the nutrition in the ganglion cells of the cortex becomes impaired, diseased, or in some way altered from health. The author referred to neuralgia, or one-sided headache, which he said was more common in children than was generally supposed. He had known headache in connection with chorea and dental caries. Dr. Cheadle considered foul air and gas were the chief causes of study-headache; he referred to headaches in rickety children. This occurred just after the skull closed, was continuous, but gradually subsided. Dr. Mackenzie particularly insisted on the importance of careful examination of the eyes in cases of headache of children. Muscular asthenopia was a cause of headache which sometimes was mistaken for serious organic disease. He mentioned the case of a schoolboy brought to him under this supposition, but myopia was found and corrected, and the headache disappeared. The same thing occasionally occurred with hypermetropia. Next he pointed out that ear disease was sometimes the cause of headache; which is important as significant of commencing meningeal or cerebral inflammation. In all cases, therefore, of headache in children, it is very important to examine the ear and the eye, using the ophthalmoscope, which will be of great value in detecting organic disease. He remarked that pain in the head, a valuable sign of tumor of the brain, was no certain indication of localization of the tumor, unless there was corresponding pain on percussion. The President, in conclusion, said that headache, though not a common symptom in children, was one of import, and frequently indicated advanced disease.

Acute Farcy in Man.

At a recent meeting of the Pathological Society of London (*Medical Times and Gazette*), Dr. Howard Bendall said this was the case of a healthy man, who was inoculated from a horse suffering from farcy. When first seen he was suffering from multiple abscesses, which were chiefly situated in the neighborhood of the joints. Shortly afterward the characteristic pustular eruption appeared on the skin, and signs of pneumonia supervened, accompanied by dyspnœa. The dyspnœa rapidly increased, and the patient died comatose. The objects of chief interest at the autopsy were the lungs. These were both deeply congested, the left lung showing, in addition, extensive lobular pneumonia of the left base. Microscopically, the lungs were crowded with fatty emboli; hence the intense dyspnœa. In addition to this, the pus from the abscesses was found to contain free oil in considerable quantity, while sections from the neighborhood of the ulcers on the skin and mucous membrane showed the tissues to be in a state of rapid necrosis, in which almost all the cell elements had disappeared. The tissues in these parts were loaded with amorphous fat granules, of all sizes. Dr. Coupland had seen a similar case about ten years ago. Dr. Bendall called this case "farcy," because the nasal symptoms came on early, and were the most marked feature of the disease.

Pregnancy Complicated with Epithelioma.

At a recent meeting of the Obstetrical Society of London (*Medical Times and Gazette*), Dr. Edis asked for an expression of opinion on the following case: A woman, aged twenty-nine, married seven years and nine months, mother of one child eighteen months old, came as outpatient, on account of pains and sanguineous discharge, and was found to be six months pregnant. The whole of the cervix, and the posterior wall of the vagina down to within an inch and a half of the perineum, was affected with epitheliomas. The cervix was dense, nodulated, rough, but did not bleed very readily. The whole disease

could not be removed by the Porro-Freund operation, and the question was whether to induce premature labor, or to let the patient go to term and perform Cæsarean section.

Dr. Wiltshire thought that if the disease had extended down the posterior vaginal wall nearly as far as the perineum, Porro's operation would fail in removing it. He mentioned a case of excessively dense cancer of the cervix, in which he preformed Cæsarean section, some years ago, but in which Porro's operation would have been admissible had it been then in vogue.

Dr. Herman said that published cases showed that the consistence of the growth was of more consequence, as regards delivery, than its extent. Living children had been borne after quick and easy labors, although the whole circumference of the cervix and vagina was cancerous; and, conversely, cancer of small extent might, if very hard, cause great obstruction.

Dr. Priestley agreed with Dr. Herman, that the consistence of the growth was of most importance. He did not think the case suitable for Porro's operation, as the child was not viable at the sixth month, and the mother's life could hardly be prolonged by it. He would chiefly regard the child's life, and would be disposed to let the woman go to full term, or nearly so, and then act according to the amount of obstruction found to exist.

Iodine in Typhoid Fever.

Dr. N. S. Davis, in the Chicago *Medical Journal and Examiner*, says, "To more effectually counteract these morbid changes (in typhoid fever) we need some remedy capable of exerting a general alterant and antiseptic influence, and maintaining it for a considerable time without depressing the strength or creating local complications. The last time I took you to the bedside of typhoid fever patients, I called your attention to the effects of iodine, which I had then commenced giving. Since then I have continued to use the remedy in all well marked cases of typhoid. I have now used it in fourteen cases. Nine of this number were brought under treatment during the first week of the disease; the other five not until the first half of the second week. The treatment in all consisted in the administration of from 12 to 15 minims of the following solution of iodine:—

℞. Iodinii,	gr. viij	
Potassii iodidi,	gr. xxx	
Aquæ destillatæ,	f℥ iss.	M.

"The dose was generally diluted with two tablespoonfuls of sweetened water, and repeated every four hours, for the first three or four days, and then every six hours until indications of convalescence appeared. From my present experience I am led to think it is a remedy of great value, especially when its use is commenced in the forming stage, or during the first week after the confinement of the patient from the development of the fever. I am not using iodine as a *specific* curative agent in typhoid fever, but simply as a general alterant and antiseptic, adapted to fulfill certain rational indications afforded by the pathology of the disease, and always to be aided by such collateral remedies as the abdominal or other local symptoms may indicate."

Genital Irritation.

At a recent meeting of the New York Neurological Society (*American Journal Neurology and Psychology*), a paper entitled "The Effect of Genital Irritation in the Production of Reflex Nervous Symptoms" was read by Dr. L. C. Gray, of Brooklyn. His conclusions were as follows:—

1. That there is no proof that genital irritation can produce a reflex paralysis.

2. That while it is probable that the slight nervous disorders, as incontinence, retention, difficult micturition, erratic movements, and slight nervous disturbances, can be produced by genital irritation, the proof is not yet complete.

3. That operations for the removal of genital irritation may be beneficial even in organic nervous disease.

4. That we should, therefore, remove such genital irritation, if it exists, in any case whatsoever, and thus give our patients the benefit of the doubt.

5. That in all cases of nervous disorders, with accompanying genital irritation, we should not regard the latter as the cause of the former until all other probable or even possible causes have been rigidly excluded.

6. That operations upon the genitals, even when there is no genital irritation present, may prove to be a useful therapeutic measure in certain cases.

Ergot for Enlarged Spleen.

Dr. W. E. Manuel contributes the following case to the St. Louis *Courier of Medicine*. He was called to a gentleman 43 years of age, with an enlarged spleen, covering nearly the entire abdominal cavity and extending as far back as the border of the liver.

Two weeks before the spleen had commenced to enlarge. It was very firm, hard and painful. No malarial origin of this enlargement could be discovered. He was very much reduced in weight and extremely weak. He was also suffering with nephritis. The urine was of a dirty, brownish appearance, filled with sediments, the chief of which were phosphates and urates, while it was loaded with albumen. Subsequent events proved that the pressure of the enlarged spleen accounted in a certain degree for the albuminuria. The treatment was commenced with thirty minim doses of Squibb's fluid extract of ergot, three times a day, to be gradually increased until the dose reached sixty minims. In three days the spleen had lost a great deal of its hardness and was flabby to the touch, though not noticeably reduced in size. In one week there was a perceptible diminution, and from that time, day by day, he could perceive a marked diminution, until it has now returned to almost its normal condition. With the reduction of the spleen, the kidneys became decidedly better, the albumen almost entirely disappeared, and with buchu, uva ursi, and copaiba, taken as the spleen reduced, his urine began to clear up.

Poisoning by Yellow Aconite.

The *Medical Times and Gazette* has the following: "A lady had a bunch of freshly cut flowers of the yellow aconite in a glass of water on the table in her drawing room; a pet dormouse belonging to one of the children was running about on the table, over the child's hand and arm. The child said the dormouse was thirsty, and she took her little thimble, filled it with water from the glass, and offered it to the dormouse. The animal drank it readily. In a minute or two it fell over on its back; and after a short struggle, died on the table." The yellow aconite would thus seem not to be quite so inactive as has been assumed.

Hypnotism.

The Paris special correspondent of the *Lancet* says: M. Milne-Edwards, the president of the commission appointed by the Academy of Sciences to report upon M. Dumontpallier's experiments on hypnotism, read a short note on the subject, which will probably bring the inquiry to an abrupt termination. He stated that Professor Harting, of Utrecht, had communicated to him the results of similar experiments made on rabbits, fowls, guinea pigs, pigeons and frogs. The six fowls submitted to hypnotism on several different occasions died of paralysis. M. Milne-Edwards announced that he would carry out analogous experiments at the Jardin des Plantes, but that they must be considered as too dangerous to be performed upon human beings, without considerable circumspection. M. Vulpian had already marked his appreciation of this kind of inquiry by withdrawing from the commission. Whether there is really any immediate risk to a hysterical girl from the treatment she receives in a Paris hospital may be open to doubt, but there can be no question that, in the long run, it is extremely injurious.

Nasal Calculi.

In our issue of March 11th (on page 271) we offered a note on this subject, from the St. Louis *Medical and Surgical Journal*. From a subsequent issue we notice that Dr. Porter stated to the St. Louis Medical Society that he knew of a most interesting specimen, a foreign body, which was removed from the nose of a gentleman of that city. He had chronic discharge from the right nostril, and had been well treated by others, and when examined it could not be ascertained why he did not get well; but on watching the case a little further, it was found not to respond to the usual methods of treatment. One day he discharged from the antrum (there was no doubt of the locality), a little mass which was found to be an embryonic tooth that had been pushed into the antrum, and had doubtless remained there many years. This gentleman said that he had this discharge from boyhood, and was 38 years old. The discharge of this foreign body completely relieved him.

Foreign Bodies.

In a recent issue we noted a case in which a grain of corn was discharged through the chest; commenting on this case Dr. Wilks, President of the Pathological Society of London (*Lancet*), recently read a letter from Dr. Francis Darwin, stating that he knew of horns of grass and corn which had pierced the various organs and parts of animals. In South America a grass-seed works its way right through the skin of the sheep. In Australia the fruit of a grass works its way through the chest and abdomen of animals, and into the heart, lungs, liver and kidneys. These two grasses are adapted to working down into the ground under changes of temperature and moisture. The horns and barbs on the ear of corn in Dr. Wilks' case are directed backward, and therefore any movement forces it on, and cannot make it recede.

Special Reports.

NO. V.—OPHTHALMOLOGY (Continued).

BY CHAS. S. TURNBULL, M.D.

On the Extraction of Cataract—Knapp's Modification of Graefe's Peripheric-linear and Wecker's Flap-section, with Peripheric Capsulotomy and Subsequent Discission of the Capsule.

Both observation and experience induce us to recommend what is known as "Knapp's modification" of the operation for the extraction of cataract,* and, as we consider his method of sufficient interest and importance, we quote his own words and describe the details of the operation somewhat at length, in the hope of tempting the more progressive, and especially the younger, members of the profession to give this method a fair trial, with the full assurance that it offers more advantages and less disadvantages than any other, and, on the basis of statistical data, claims a peculiar influence on the final object of all operations for cataract—the restoration of sight.

In a recent lecture† Knapp makes a synopsis of *thirty extractions*, which serve as a basis for the following remarks, in the course of which he describes in detail the steps of his operation; and we have added cuts of most of the instruments he employs:—

"The *youngest* patient was a servant girl, aged thirty-two years, whose cataract I would, under ordinary circumstances, have operated on by division, but as she was blind in both eyes, had only recently come to this country, and was without support, I preferred that operative procedure which restored her sight in the shortest time. There were three patients between forty and forty-eight years of age; the remainder were over fifty. The oldest was eighty-two.

"The *method* was a *more or less linear or low-flap section, with a broad iridectomy, and peripheric opening of the capsule.* In the first operations (Fig. 1), Graefe's section begins and terminates one millimeter in the corneo-scleral junction, its apex being at the transparent margin of the cornea, or even one to two millimeters below it. Gradually I shifted into the flap-section (Fig. 2), which De Wecker, of Paris, recommends as the best, namely, a section with a Graefe's knife, situated exactly in the transparent margin of the cornea, extending over its upper third.

Fig. 1.

Fig. 2.

For full-sized cataracts, I made it somewhat larger. Both sections—the linear and the flap—have their advantages and their disadvantages; the linear does not incline to tilting, and shows a very accurate coaptation, but as its ends are nearer to the insertion of the iris, it is more liable than the flap to adhesions and incarcerations of the iris and to cyclitic processes. With regard to firm closure of the wound, one of the most important factors in the whole operation, the flap, though easily gaping during the operation and soon after it, has one redeeming quality—it cuts the lamellæ of the cornea obliquely, not at right angles, as the linear section does. This principle of oblique piercing is frequently made use of, and with admirable ingenuity, in the animal organism. Let me only mention the ductus choledochus piercing the wall of the duodenum obliquely, by which contrivance the bile can, without obstacle, flow into the gut, but the food, while passing from the pylorus onward, will press the inner wall of the valve-like opening of the bile-duct against the outer, and thus completely close the aperture. Somewhat in the same manner the inner lip of the flap-section is pressed against the outer by the contents of the globe, whereby a firm and lasting closure may be established. Theorizing is a fine thing in its way, but worthless without the test of experience, because in complicated problems we commonly fail to know and appreciate the quality and quantity of all the coöperating factors. Wecker's section has thus far shown us very kind healings, encouraging to further trial."

The most approved form of speculum, *i. e.*, Graefe's modified, is shown by Fig. 3. The arms are curved so that the loop of spring and adjusting screw are out of the operator's way. There is a right and left speculum. Fixation forceps by Fig. 4, and a typical Graefe's cataract knife, by Fig. 5.

Fig. 3.

Fig. 4.

Fig. 5.

* Knapp's previous report of a hundred cases of extraction (the sixth hundred), published in the July number, 1879, of the *Archives of Ophthalmol.*, refers to 66 successive cases of extraction with peripheric capsulotomy, and, together with the preliminary communication in Vol. VI, and later in Vol. X, No. 3, contains the substance of his views and experience on this subject, also historical and critical remarks on the peripheral opening of the capsule.

† On the Extraction of Cataract. By Herman Knapp, M.D. The *Medical Record*, New York, Feb. 18th, 1882.

"The *iridectomy* in almost all of our operations was large. The coloboma varies from ⅓ to ½ of the corneal circumference. When the corneal section and the opening of the capsule are peripheric, it must be large, or the columns of the coloboma will be an obstacle to the exit of the lens, which, if overcome by force, entails bruising and incarceration of the iris. When the iris is being cut, it ought not to be dragged with the iris forceps (Fig. 6) into the corners of the section, since there the lips of the wound act like clamps, holding the iris-tissue tight between them. It is good practice to seize the iris in the centre of the section, draw it straight up and cut it off close to the cornea—carefully avoiding the corneal tissue itself—in one, two, or three strokes of the iris scissors (Fig. 7), as may prove convenient, and afterward, according to the sufficient or insufficient size of the coloboma, either reduce or exsect iris tissue which may still lie in the corners. Such tissue, even after a clean and apparently satisfactory iridectomy, remains hidden in the wound more frequently than we imagine. Proofs: 1. The anatomical examination of eyes on which iridectomy had been made for glaucoma, or combined with cataract extraction, commonly found the stump of the iris or its adjacent tissue united with the corneal scar, even if no outward inspection could discover such a condition. 2. Many times, when passing the cystotome from the corners of an apparently unobstructed corneal section toward the centre, I drew iris-tissue along, which was either the periphery of the adjacent iris, or the stump of the part which had been removed. Such portions, of course, have to be grasped with the forceps and cut off. This observation has taught me not to rest satisfied with an apparently correct coloboma, even if its sphincter edges are in the anterior chamber, but, before opening the capsule, to clear the whole extent of the corneal section, especially the corners, of iris-tissue, which, with a delicate probe or spatula, may be stroked back into the anterior chamber."

FIG. 6.

FIG. 7.

"When the wound is clean the operator takes the fixing forceps in his own hand, presses gently with it on the globe, so as to make the corneal section slightly gape, and *passes the needle cystotome* (see Fig. 8) *from the inner corner of the section to the outer, through the anterior capsule of the lens.* This manœuvre has to be closely watched; a far-sighted operator should make himself near-sighted by convex spectacles, and either daylight or artificial light ought to be thrown on the eye by a large convex hand-lens, so that the point of the cystotome can be accurately followed in its course through the capsule. An insufficient capsulotomy is commonly without consequences, as the cataract on its way out enlarges the opening; only in tough capsules it is an obstacle to the expulsion of the lens, and may lead to prolapse of vitreous. When I had practiced this mode of opening the capsule in about two hundred cases, I varied it, not because I was dissatisfied with its results, but in order not to get wedded to one particular procedure. There is no conceivable way of opening the capsule that has not here and there been tried. The one just described is the simplest in execution, and the least injurious to the eye, but it has the disadvantage of necessitating, in the majority of cases, an after-operation, viz: the subsequent central splitting of the capsule. In order to avoid that, I have lately joined to the horizontal division a larger vertical one than I made a few years ago while practicing a T-shaped opening. A *bent needle cystotome* (Fig. 10) is introduced into the anterior chamber, and the capsule slit open from the lower edge of a middle-wide pupil, up to the centre of the corneal section. In order not to let the outcoming lens enlarge the upper end of the capsular wound irregularly, I made the horizontal incision in one case with a delicate, sharp-pointed scalpel, the point of which was inserted into the upper end of the vertical incision of the capsule at the centre of the corneal section, pushed forward toward one corner of the wound, and then, by raising the hilt, one-half of the upper margin of the capsule was ripped open. In the same way the other half was dealt with. In another case I made the horizontal incision of the capsule with the needle cystotome, which was passed first from one, then from the other corner of the corneal section through the capsule, so as to meet the upper end of the vertical capsular section. If the cystotome were passed

FIG. 8.

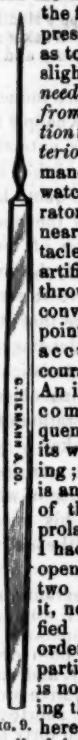

FIG. 9.

FIG. 10.

from one end of the section to the other, it would split the first half of the capsule, but most likely not the second, for when fallen into the vertical section, it would enlarge this by dragging the capsule before it rather than cut it. The few cases thus operated on did well; the first one showed some transient adhesions of the iris to the shreds of the capsule. It remains to be seen whether a greater number of cases will yield as smooth recoveries, and better permanent vision than the other now well tried method.

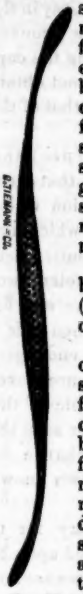

Fig. 11.

"The *expulsion of the lens* is effected by pressing with a hard rubber spoon (Fig. 11) on the lowest part of the cornea.

"The *after-operation*, the subsequent central division of the capsule, is an essential feature in this mode of operating for cataract. Without it the method could not stand, as it has also virtually been abandoned by the operator who first, in 1873, tried it on a larger scale, namely, Professor Gayet, of Lyons. He made no after operations, and was dissatisfied with the imperfect visual results. The empty capsule will wrinkle and opacify, requiring subsequent splitting, in the majority of cases. But then, the visual results are permanently good, and better than by any other method, except the removal of the lens within the capsule, which, according to its warmest advocate, Dr. Herman Pagenstecher, is indicated in thirty per cent. of the patients only.* But do the methods with central opening of the capsule, even in their successful cases, commonly yield good vision permanently? By no means. With them, too, the capsule will wrinkle and opacify, and vision be reduced to a surprising degree.

"The subsequent division of the capsule comprises not only its anterior, but also its posterior half, and, therefore, gives a perfectly unobstructed pupil. The imperfect visual results, after the primary central division of the anterior capsule, have always been felt by the profession, and given the incentive to different attempts at obviating this disadvantage, among which I will mention the puncture of the vitreous, immediately after the expulsion of the lens, which Professor Hasner, of Prague, has made for many years, and which, as I saw last summer, has been adopted, on trial at least, by Schweigger. Both gentlemen assert that this procedure is not dangerous, but neither has, as yet, published statistics to convincingly support their assertion. The subsequent division of both capsules is an innocent operation; I have done it more than a hundred times. Only in a few cases the reaction from it lasted longer than a few days, and never was the vision made worse. The technique of the operation, however, is peculiar, and has to be learned. The operation requires, above all, two things, without which nobody should undertake it: first, *good artificial light*, thrown on the eye with a large lens, so that during the operation every wrinkle, dot and stria of the capsule can be seen, as well as the course and effect of the needle; second, a *sharp, well-proportioned scalpel needle** (see Fig. 9), with which the capsule can be cut without tearing. I first make a horizontal incision, then a vertical one, varying them, however, according to the conditions of the capsule. No aqueous should, none need escape. I have described it in the *Archives of Ophthalmology*, Vol. VIII, No. 2, p. 200, Vol. X, No. 3, p. 295.

"Now, in conclusion, a word or two on *antisepsis in cataract operations*. I have never thought much of the specifically antiseptic *substances* which ophthalmology has recently borrowed from general surgery, and I cannot yet see any reason to change my opinion. If the adherents of the antiseptic method affirm that this essentially consists in the careful observation of all the rules that secure or at least favor union by first intention, they have no warmer friend than me. Those rules are no modern revelation, and in no operation have they been more carefully studied than in the extraction of cataract. If, however, antisepsis means "bacteria-killing"—to express it in one word—and its advocates assert that all their methods and antiseptic substances employed before, during, and after the operation have this fundamental aim and object, then I think they hunt a phantom. I am far from denying the existence of micrococci and bacteria; they are on and in all open, moist tissues, though the conjunctival sac shows them less than most other places (see Wernich's instructive book, "Die Desinfectionslehre"). I do not, of course, deny the existence of infectious substances, such as blennorrhoic, even dacryocystitic, and similar secretions, as well as decomposed and fermenting bodies; but, gentlemen, these substances are but *one group of irritants*, which, as all the others, ought carefully to be guarded against. Besides them, there are plenty of mechanical and chemical irritants, which have equal claims on our consideration. The great modern dictum, "No suppuration without bacteria," which was until quite recently ardently defended, has proved untenable; even its most zealous advocates had to concede that croton-oil and other substances produced suppuration, without any coöperation of bacteria. One of the latest investigators of this subject, Dr. N. Uskoff, answers the question whether or not suppuration is possible independently of low organisms? positively in the affirmative (*Virchow's Archiv*, vol. lxxxvi, p. 150, etc., October, 1881), and does so, not from theoretical speculation, but based upon numerous experiments made by him and Professor Ponfick, at the Pathological Institute of the University of Breslau. Lister himself, in closing the discussion on this subject, at the last International Medical Congress, said: "Solid bits of dirt are the great sources of danger, rather than certain invisible particles that float in the air, and have, perhaps, been invested with more deleterious functions than they really possess" (*British Med. Jour.*, October 1st, 1881, p. 550).

*On the Extraction of Cataract in its Capsule. By H. Pagenstecher, M.D., of Wiesbaden. *Archiv. f. Ophthal.* Vol. VIII, p. 243, Vol. X, p. 152.

* Reliable needles of this kind, as well as the other instruments, are made by Tiemann & Co., New York.

"The antiseptic methods which have conquered, for good reasons, the greater part of the surgical world, have also many adherents among the first names in ophthalmology. I will mention to you only Wecker, Horner, Snellen, Leber, H. Pagenstecher. Alfred Graefe, whose early paper on the subject, in Graefe's *Archives*, has made so many converts, had the mortification to see that the good results, not to say the good luck, which had attended his earliest antiseptic procedures had unaccountably deserted him later, so that he is said to have become skeptical. Horner stated, in London, that, apart from antiseptic precautions, success depended upon the most delicate execution of every step of the operation. Now, what has *experience* to say on the question of antiseptics in ophthalmology? Where are the all-important statistics to support it? They have not yet come forward. The best operators, *e. g.*, Wecker and Horner, still concede one per cent. to two per cent. of total loss by suppuration. This is a less percentage than the old flap showed, but not less than is obtained by a careful execution of Graefe's extraction, without antiseptics, and the results in this institution, for years, have been no worse. There were two cases of suppuration in the last hundred extractions I reported on. Since then, March 3d, 1880, fifty-two extractions were performed, without the occurrence of suppuration, even without the loss of an eye from any cause. Several larger series of operations, performed under antiseptic precautions, have been published (Just, Reymond and others) which are quite unfavorable. Yet this subject is still under discussion, and, though I am not prejudiced in favor of the bacteria killing contrivances, I shall not tire in giving the question how to secure healing by first intention, how to avoid inflammation in general, my undivided attention. In order not to judge of the subject without personal experience, I shall continue to give antisepsis a fair trial, until facts sufficiently numerous pronounce their unambiguous verdict. Every alternate operation in the thirty cases which were witnessed, and which were the basis of these remarks, was performed under antiseptic precautions. Though I shall have to return to this subject later, I may here state that a difference in the course of healing has not been apparent, and, if asked my candid opinion, I would say that the best antiseptic is twenty years' experience."

That we may do full justice, we quote from no less distinguished an authority than Dr. Herman Pagenstecher (*loc. cit.**) who advocates the *operation of extraction of all mature cataracts in their capsule*, and says, "Indeed, I go so far as to say that we make a great mistake—will the older operators pardon my expression?—when we operate on cataract after irido-choroiditis, or on hyper-mature, or Morgagnian cataracts, in any other way than by extraction in the capsule." He at the same time, by calling attention to an old and well established ophthalmological fact, says he lays down one important rule, which, nevertheless, will bear constant repetition, *i. e.*, "cataracts which have matured rapidly, say in the course of a few months, should never be removed in the capsule, but always by opening the capsule. In some cases the capsule does not obtain sufficient strength in comparison with that of the zonula."

"One reason why (says Pagenstecher) this method has been so little employed is, that every one likes to continue with the operation which he first learned and practiced, and which has probably, so far, given satisfactory results; secondly, everybody imagines that it is a violent procedure to pass the flat spoon into the eye, for the purpose of removing the lens. Then it is a common opinion that loss of vitreous endangers the eye; further, we are told that we are never sure of removing the lens with the whole of the capsule; and, finally, many have never seen the operation, and hence have had no chance for deciding upon its merits from their own knowledge.

"In the first place, it is necessary for us to be sure what cases are to be operated upon by extraction in the capsule, and what cases are not. Our own (P. and his brother, the late A. Pagenstecher) observations, combined with a moderate degree of attention, soon throw light upon this point, and he who at first only ventures to employ the operation in the cases where it is undoubtedly the best, such as cataracts after irido-choroiditis, pronounced hyper-mature cataracts and Morgagnian cataracts, will soon gain more and more confidence in the operation, and discover for himself in what further series of cases it is indicated."

Comment is unnecessary upon this method of extraction of the lens within the capsule, which, says Knapp, "is, according to its warmest advocate, Dr. Herman Pagenstecher, only indicated in thirty per cent. of all cataracts."

*Translated by James A. Spalding, M.D., Portland, Maine.

Correspondence.

Obscure Cases.

Ed. Med. and Surg. Reporter:—

A bright little girl, 11 years old, had a sore throat for a few days and a stiff neck for a fortnight. At this time I first saw her, on washing day, when being up and around she evidently took more cold, and all symptoms were much aggravated except sore throat. Left side all right. Right sterno-mastoid and gland at angle of the jaw much swollen, and also the tonsil and root of tongue, swelling extending up to right eye. Head turned to left and held in constrained position. Voice almost extinguished. Swallowing

difficult, not from soreness but from swelling. Examination of throat impossible. This was on Monday. At my visit on Thursday, found that in previous night something had broken, and patient was spitting bloody pus, with much relief. On Friday better. Did not see her again until Monday, when symptoms were worse. Quick pulse, more fever, pain and tenderness of legs, but no swelling, pupil of right eye much dilated. During night had spit up more bloody pus. While reporting to the mother Watson's case of quinsy the patient cried out, "It is coming," and immediately threw off a large quantity of bright blood. Inspiration drew some into the lungs, and in one or two minutes a general convulsion ended the scene. What was it? Who has seen the like? What could have been done?

CASE 2.—A married woman, aged 31, arose in the morning in usual health, prepared breakfast, and was taken with a "fainting fit." On the previous evening had taken a small dose of castor oil, for constipation and piles. After two hours I found her in complete collapse; very pale, cold sweat, no pulse at wrist, heart beat slow, feeble, but not abnormal. Great pain at epigastrium. Lay on left side and could not turn on to the back. Had missed two menstrual periods and been suffering a long time with leucorrhœa, but without treatment. Had been pregnant only once, and miscarried at three months. Seemed like one suffering severe hemorrhage; mind all right. Ventured a diagnosis of extra-uterine pregnancy or perforating ulcer of the stomach. Brandy failed to rally her, and she died at 4 P.M. same day. Autopsy showed two quarts of blood in the abdominal cavity, and great enlargement of left Fallopian tube, which had ulcerated and showed an opening the size of a dime, its inner surface lined with coagulated blood. The left ovary had developed a serous sac as large as an ordinary hen's egg. There was also a smaller cyst in right broad ligament. These two cases happened within three months, in an ordinary country practice. S. L. CHASE, M.D.

Colchester, Conn.

NEWS AND MISCELLANY.

COMMENCEMENTS.

Jefferson Medical College.

The Annual Commencement of the Jefferson Medical College was held in the Academy of Music, on Thursday, March 30th. The ceremonies commenced with prayer by the Rev. I. L. Nicholson, after which the degree of Doctor of Medicine was conferred upon 247 graduates. The degree of D. D. was conferred upon Rev. I. L. Nicholson, of St. Mark's P. E. Church, and Rev. Charles Maison, of St. James P. E. Church, Kingsessing. The degree of LL. D. was conferred on Dr. Thomas Addis Emmett, of New York. The prizes to the graduates were awarded as follows:—

1. A prize of $100, by Henry C. Lea's Son & Co., for the best Thesis, to Samuel O. L. Potter, of Wisconsin; with honorable mention of the Theses of Charles Meigs Wilson, Hiram R. Loux, and Horace G. Hill, of Pennsylvania; and Henry B. Fergerson, of North Carolina.

2. The "Robley Dunglison Prize" of $50, by Dr. Richard J. Dunglison, for the best research in Physiology, to Edwin Bergstresser; with honorable mention of the Thesis of J. Edgar Belville, of Pennsylvania.

3. A prize of a Gold Medal, by R. J. Levis, M.D., for the best Report of his Surgical Clinics at the Pennsylvania Hospital, to Henry E. Everett, of Pennsylvania; with honorable mention of the report of A. Bern-Hirsch, of Pennsylvania; J. Augustin Herrero, of Porto Rico; and Richard Douglass, of Tennessee.

4. A prize of a Gold Medal, by Thomas G. Morton, M.D., for the best report of his Surgical Clinics at the Pennsylvania Hospital, to Edwin Eareckson, of Pennsylvania; also, a second prize of a work on Surgery, to David H. Melhorn, of Pennsylvania.

FACULTY PRIZES.

5. A Case of Instruments, for the best Essay on a subject pertaining to Surgery, to William Niles Powell, of Pennsylvania; with honorable mention of the Theses of John Franklin Foulkes, of California; James E. Baker, of Wisconsin; and Edwin B. Mathiot, of Pennsylvania.

6. A Case of Instruments, for the best Essay on a subject pertaining to Obstetrics, etc., to Charles L. Whitfield, of Texas; with honorable mention of the Theses of John B. Mahon, of Pennsylvania; and Luigi M. de Jesi, of Italy.

7. A Gold Medal for the best Essay on a subject pertaining to the Practice of Medicine, to Herbert M. Seem, of Pennsylvania; with honorable mention of the Theses of Louis W. Atlee, of Pennsylvania; and Frank E. Wilson, of New York.

8. A Gold Medal for the best Anatomical Preparation, to John Sebastian Miller, of Pennsylvania.

9. A Case of Instruments, for the best original research in the Chemical Laboratory, to Charles H. Ballentine, of Pennsylvania; with honorable mention of the Essays of Horace B. Scott, of Connecticut; and Justin D. Lisle, of Ohio.

10. A Case of Instruments, for the best original research in the Materia Medica Laboratory, to Charles A. Koder, of Pennsylvania; with honorable mention of the researches of A. Rusling Rainear, of Pennsylvania; Jason H. Moore, of Kansas; Isaac E. Clark, of Texas; and Charles A. Service, of Pennsylvania.

11. A Case of Instruments, for the best Essay on a subject pertaining to Physiology, to Charles Z. Weber, of Pennsylvania.

It was announced that at an examination held in June, 1881, diplomas were awarded to John Fruit, Reid C. Matthews, and Oliver P. Stoey, of Pennsylvania.

The valedictory was then delivered by Professor Henry C. Chapman, and after the rendering of another musical selection and the benediction, pronounced by Rev. Dr. Nicholson the audience dispersed.

Alumni Meeting.

The annual meeting of the Alumni Association of the Jefferson Medical College was held March

29th, in the hall of the college building. Professor Samuel D. Gross, president of the Association, called the meeting to order. Letters from members abroad, regretting their inability to be present were read, after which the report of the treasurer, Dr. Hatfield, showing the expenditures of the year, was read. The following officers were elected to serve during the ensuing year: President, Professor Samuel D. Gross; Vice-presidents, Drs. E. B. Gardette, Ellwood Wilson, A. Hewson and R. J. Levis; Treasurer, Dr. N. Hatfield; Recording Secretary, Dr. T. H. Andrews; Corresponding Secretary, Dr. R. J. Dunglison.

Alumni Supper.

On Tuesday night, March 28th, the supper of the Alumni Association of the Jefferson Medical College was given at the Hotel Bellevue, at which a large number of professors and alumni were present.

Professor Gross.

Professor Gross has resigned the chair of Surgery in the Jefferson Medical College, of which he has been the incumbent for twenty-six years. His son, Dr. S. W. Gross, has been elected to the chair of Principles of Surgery and Clinical Surgery, and Dr. John H. Brinton to the chair of Practice of Surgery and Clinical Surgery.

Physicians.

The following is the table of graduates of the medical colleges this year, as compared with those of last year:—

	1882	1881
Philadelphia Dental	52	64
Pennsylvania Dental	51	58
Hahnemann	57	83
College of Pharmacy	117	140
Women's	19	19
Chirurgical	3	..
Jefferson	247	205
University of Pennsylvania:—		
Medical	122	115
Dental	41	47
Totals	709	731

Essays upon The Radical Cure of Cancer, Offered for Prizes.

The undersigned, who, in October last, was delegated to receive competing essays on the subject of the radical cure of malignant disease, announces that three essays were presented. In the consideration of their merits the assistance of Dr. George B. Shattuck, editor of the *Boston Medical and Surgical Journal*, was invoked; and it has been decided that no essay is worthy of a prize.

The same subject, namely, "The Probability of the Discovery of a Cure of Malignant Disease, and the Line of Study or Experimentation likely to bring such a Cure to Light," is proposed for essays to be presented in competition, not later than the first day of December, eighteen hundred and eighty-three (1883), to the undersigned, who, with such assistance as he may select, will be the judge of their merits.

For the best essay on the above subject, a prize of one thousand dollars will be given, the right being reserved to withhold the prize in case no essay of sufficient merit be presented.

The sum above mentioned has already been deposited in the New England Trust Company, of Boston, subject to the call of the judges.

The essays must be legibly written in English, and neatly bound. Each one must bear a motto, and be accompanied by a sealed envelope bearing the same motto, and inclosing the name and address of the writer. They will all remain in the possession of the donor of the prize, for convenience of reference, and the privilege is claimed to publish the successful one, with the name of the writer. No writer, however, surrenders the privilege of retaining a copy of his essay, and publishing it.

The decision concerning the merits of the essays will be made chiefly from a practical standpoint, it being the object of the donor of the prize to obtain suggestions by which a search for a cure for cancer may be instituted.

For the donor,

J. Collins Warren, M.D.,
58 Beacon street, Boston, Mass., U. S. A.

QUERIES AND REPLIES.

S., Ky.—We know of only one, which occurred in this city, and it was not positively proven to be due to the anæsthetic.

A. G. C.—Pure vaccine lymph is not a *poison*, in the ordinary acceptation of the term. It is absorbed by the lymphatics. It is not corruption in the true sense of the word.

Subscriber.—Continuance of the treatment you mention ought not, on general principles, to be at all injurious, but with so powerful a drug, the patient ought to be carefully watched.

MARRIAGES.

HAYNES—FELLOWS.—On March 14th, 1882, by Rev. H. L. Jones, at the residence of the bride's parents, John R. Haynes, M.D., of Philadelphia, and Miss Dora Fellows, of Wilkesbarre, Pennsylvania.

MARKOE—SHELTON.—In New York, on Thursday, March 9th, by the Rev. Charles H. Parkhurst, D.D., Dr. Francis Hartman Markoe and Madeline, daughter of Theodore B. Shelton.

PATTERSON—BELL.—At Glendale O., March 8th, 1882, by Rev. Dr. Potter, at the residence of the bride, Dr. John E. Patterson and Mrs. Sarah E. Bell, all of Glendale.

DEATHS.

CHAMPLIN.—Dr. James T. Champlin, ex-President of the Colby University, died on March 15th, at Portland, Maine, of paralysis, at the age of 70 years and 9 months.

McFADDEN.—In this city, on March 12th, Dr. James McFadden, in the forty-ninth year of his age.

MORROGH.—At New Brunswick, New Jersey, Clifford T. Morrogh, M.D., on Monday, March 13th.

REESE.—At Knoxville, Tioga Co., Pennsylvania, on Sunday, December 4th, 1881, of typhoid fever, Alice M., wife of C. A. Reese, M.D., aged 31 years and 3 months.

SMITH.—On March 10th, Dr. George Smith, of Delaware County, aged seventy-eight years.